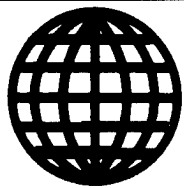


JPRS-TEP-90-004  
17 APRIL 1990



**FOREIGN  
BROADCAST  
INFORMATION  
SERVICE**

# ***JPRS Report***

---

# **Epidemiology**

---

**(DTIC QUALITY INSPECTED 3)**

**19981211 089**

# Epidemiology

JPRS-TEP-90-004

## CONTENTS

17 April 1990

### SUB-SAHARAN AFRICA

#### CAMEROON

- 15,000 Cases of Leprosy in 1989 [*Yaounde CAMEROON TRIBUNE*, 30 Jan 90] ..... 1
- Sexually Transmitted Diseases Down; Malaria Up  
[*Shifu Ngalla; Yaounde CAMEROON TRIBUNE*, 24 Oct 89] ..... 1

#### ETHIOPIA

- Rinderpest Outbreaks Lowered by Vaccination Program  
[*Makonnen Haile; THE ETHIOPIAN HERALD*, 7 Jan 90] ..... 1

#### GABON

- Data on Percentage of Children Vaccinated [*Libreville L'UNION*, 2-3 Dec 89] ..... 2

#### MALI

- More Than 32,000 Cases of Malaria in 1988 [*M. Diakite; Bamako L'ESSOR*, 14-15 Oct 89] ..... 2

#### MAURITIUS

- Campaign Launched To Replenish Blood Bank  
[*Dharmanand Dhoocharika; Port Louis LE MAURICIEN*, 7 Feb 90] ..... 2
- Health Ministry Takes Steps Against Disease From Madagascar  
[*Port Louis WEEKEND*, 11 Mar 90] ..... 3

#### MOZAMBIQUE

- Vaccinations End Threat of Childhood Diseases [*Maputo NOTICIAS*, 23 Feb 90] ..... 3

#### NIGERIA

- Outbreak of Meningitis in Niger State [*Ilorin SUNDAY HERALD*, 27 Jan 90] ..... 4

#### SENEGAL

- Lepers in Treatment Number 9,000 to 12,000 [*Dakar WAL FADJRI*, 8 Dec 89] ..... 4
- Survey of Infectious Diseases, Remedies in Last Decade  
[*Saphie Ly; Dakar SUD HEBDO*, 28 Dec 89] ..... 5
- Hepatitis B Kills Three a Day: Vaccine Tested [*Fara Diaw; Dakar LE SOLEIL*, 21 Sep 89] ..... 5
- Cooperation in Battle Against Cattle Plague [*Moussa Sadio; Dakar LE SOLEIL*, 16 Jan 90] ..... 6

#### SOUTH AFRICA

- AIDS-Like Disease Wipes Out Chickens [*Johannesburg THE CITIZEN*, 15 Jan 90] ..... 6

#### ZAMBIA

- Southern Province to Launch Malaria Control [*Lusaka TIMES OF ZAMBIA*, 6 Dec 89] ..... 7
- Cerebral Palsy Cases Caused by Malaria [*Lusaka TIMES OF ZAMBIA*, 18 Jan 90] ..... 7
- Anthrax Outbreak in Munbwa District ..... 7
- Humans, Cattle Affected [*Lusaka TIMES OF ZAMBIA*, 18 Jan 90] ..... 7

Deaths Occur Within 24 Hours	[Lusaka SUNDAY TIMES OF ZAMBIA, 21 Jan 90]	8
Tsetse Fly Infestation Limits Agriculture	[Lusaka TIMES OF ZAMBIA, 29 Nov 89]	8

## CHINA

Department Confirms New Cholera Case	[Hong Kong SOUTH CHINA MORNING POST, 26 Oct 89]	9
Outbreak of Diphtheria in Anshan Area	[Liang Yin; Beijing ZHONGHUA LIUXINGBINGXUE ZAZHI, No 6, Dec 89]	9
Decrease in Cases of Major Infectious Diseases	[Beijing XINHUA, 5 Feb 90]	9
Beijing Airport Opens New Animal Quarantine Station	[Beijing XINHUA, 16 Feb 1990]	9

## EAST ASIA

### HONG KONG

Four Cases of Legionnaire's Disease Confirmed	[Mary Ann Benitez; Hong Kong SOUTH CHINA MORNING POST, 6 Feb 90]	10
Increase in Cholera Noted; Refugee Found Infected		10
Fifth Local Case Confirmed	[Mary Ann Benitez; SOUTH CHINA MORNING POST, 18 Oct 89]	10
Police Depot Taking Measures	[Mary Ann Benitez; SOUTH CHINA MORNING POST, 28 Oct 89]	10

### INDONESIA

Diarrhea Outbreak, Deaths in West Sumatra	[Jakarta KOMPAS, 19 Feb 90]	11
---	-----------------------------	----

### LAOS

Incidences of Malaria in Provinces		12
Champassak Province	[Vientiane PASASON, 17 Jan 90]	12
Bolikhamxai Province	[Vientiane PASASON, 18 Dec 89]	12
Agriculture Ministry Issues Cattle Epidemic Warning		12

### VIETNAM

Inefficiency Blamed in Malaria Deaths	[Bangkok THE NATION, 1 Jan 90]	12
---------------------------------------	--------------------------------	----

## LATIN AMERICA

### COLOMBIA

State of Emergency Prompted by Dengue Fever	[Bogota SEMANA, 23 Jan 90]	13
---	----------------------------	----

### GUATEMALA

Measles Epidemic Spreads Throughout Country		14
Mutated Measles Virus Suspected	[Guatemala PRENSA LIBRE, 14 Jan 90]	14
2,400 Cases Reported	[Guatemala City EL GRAFICO, 23 Jan 90]	15
Epidemic Described as "National Emergency"		
	[Guatemala City EL GRAFICO, 27 Jan 90]	15

### HONDURAS

300 Confirmed Cases of Dengue	[San Pedro Sula TIEMPO, 17 Nov 89]	15
TB Annual Death Toll Hits 250	[San Pedro Sula TIEMPO, 20 Oct 89]	16
Guillain-Barre Syndrome Affects 150	[Tegucigalpa EL HERALDO, 2 Dec 89]	16
Measles Epidemic; Immunization Plan Discussed		17
Children Mainly Affected	[San Pedro Sula LA PRENSA, 8 Nov 89]	17
92 Dead in 1989 Epidemic	[San Pedro Sula TIEMPO, 18 Dec 89]	17
120 Deaths Reported	[Tegucigalpa LA TRIBUNA, 25 Jan 90]	17

## NEAR EAST & SOUTH ASIA

### BANGLADESH

Task Force Studies Resurgent Fish Disease [Dhaka THE BANGLADESH OBSERVER, 7 Jan 90] .....	18
--	----

### EGYPT

Leprosy Remains Problem; 50,000 Cases Recorded [Jirjis Hilmi 'Azir; Cairo AL-JUMHURIYAH, 30 Jan 90] .....	18
Poultry Market Suffers Due to Virus [Affaf 'Abbas; Cairo AL-HAQIAH, 6 Jan 90] .....	19

### INDIA

Calcutta Typhoid Patients Immune to Usual Medication [Diptosh Majumdar; Calcutta THE STATESMAN, 10 Feb 90] .....	20
Symposium on Tobacco-Related Diseases [Bombay THE TIMES OF INDIA, 21 Jan 90] .....	20
India Estimated To Have 4 Million Leprosy Cases [Calcutta THE STATESMAN, 18 Jan 90] .....	21

### IRAN

Many Eradicated Diseases Make Comeback [London KEYHAN, 21 Dec 89] .....	21
---	----

### ISRAEL

Health Ministry Confirms Whooping Cough Outbreak [Tel Aviv YEDI'OT AHARONOT, 25 Oct 89] .....	22
Meningococemia Outbreak in Galilee [David Rudge, Judy Siegel; THE JERUSALEM POST, 12 Feb 90] .....	22
High Incidence of Brucellosis [Yifat Nevo; Tel Aviv HA'ARETZ, 20 Oct 89] .....	23
Incidence of Malta Fever Increases [Tel Aviv DAVAR, 26 Oct 89] .....	23
Rare Cattle Virus Found in South [Tel Aviv YEDI'OT AHARONOT, 2 Oct 89] .....	24

### PAKISTAN

Cabinet Discusses National Health Policy [Karachi DAWN, 20 Feb 90] .....	24
PIA Bans Smoking on Domestic Flights [Karachi DAWN, 16 Feb 90] .....	24
Rural Health Care Called 'Poor' [Karachi DAWN, 19 Feb 90] .....	25

### UNITED ARAB EMIRATES

Decline in Infant Mortality Rate .....	25
Health Ministry Reports on Study [George Abraham; Dubayy KHALEEJ TIMES, 28 Feb 90] .....	25
Additional Statistics From Study [Dubayy GULF NEWS, 1 Mar 90] .....	25

## WEST EUROPE

### CANADA

Whooping Cough Outbreak; Low Immunization Levels Blamed .....	27
Alberta Reserve Schools Close [Toronto THE GLOBE AND MAIL, 5 Feb 90] .....	27
500 Sticken on Alberta Reserve [Toronto THE GLOBE AND MAIL, 14 Feb 90] .....	27
Measles Strike Students at Two Schools in Newmarket [Toronto THE TORONTO STAR, 7 Mar 90] .....	27
Conference Told of High Cost of Treating Pelvic Disease [Joanne Blain; Vancouver THE WEEKEND SUN, 28 Oct 89] .....	27
Influenza Cases Reported in British Columbia, Halifax .....	28
British Columbia Epidemic Peak [Alicia Priest; Vancouver THE SUN, 4 Jan 90] .....	28
Halifax Hospital Staff [Toronto THE GLOBE AND MAIL, 4 Jan 90] .....	28

Bison in Alberta Infected with Tuberculosis, Brucellosis [Windsor THE WINDSOR STAR, 12 Feb 90] .....	28
Fear of Pine Wood Nematodes May Hurt Exports .....	29
Finland Demands Quality Controls [Toronto THE GLOBE AND MAIL, 18 Jan 90] .....	29
Exports To Be Treated [Ottawa THE OTTAWA CITIZEN, 9 Feb 90] .....	30
<b>DENMARK</b>	
Outbreak of Meningitis in West Sjaeland .....	30
Two Deaths Reported [Copenhagen BERLINGSKE TIDENDE 24 Jan] .....	30
Case in North Jutland [Copenhagen BERLINGSKE TIDENDE, 28 Jan 90] .....	30
<b>FRANCE</b>	
Meningitis Outbreak Claims Two Victims [Paris LE FIGARO, 27 Dec 89] .....	30
More Salmonella Deaths Reported [Paris LE QUOTIDIEN DE PARIS, 29 Oct 89] .....	31
New Method for Anti-Rabies Vaccination of Foxes [Jean-Yves Nau; Paris LE MONDE, 1 Nov 89] .....	31
New Rabies Virus Found in Bats [Jean-Yves Nau; PARIS LE MONDE, 1 Nov 89] .....	32
<b>GREECE</b>	
Large Number of Hepatitis-C Carriers [Athens I KATHIMERINI, 27 Jan 90] .....	33
<b>IRELAND</b>	
Death Rates From Cancer Rising .....	33
Breast, Lung, and Cervical Cancer Increasing [Stephen McGrath; Dublin IRISH INDEPENDENT, 28 Nov 89] .....	33
Urban Environment Increases Risk [Mairtin Mac Cormaic; Dublin IRISH INDEPENDENT, 6 Feb 90] .....	33
Minister Blames Death Rise on Mystery Virus [Stephen McGrath; Dublin IRISH INDEPENDENT, 6 Jan 90] .....	34
Meningitis Cases Increase; November, December Statistics Given [Stephen McGrath, Anne Maria McEneaney; Dublin IRISH INDEPENDENT, 25 Jan 90] .....	34
Emergence of Disease in Farmed Salmon Studied [Gordon Paterson; Dublin IRISH INDEPENDENT, 25 Nov 89] .....	35
<b>ITALY</b>	
Mandatory Hepatitis B Vaccinations Considered [Arnaldo D'Amico; Rome LA REPUBBLICA, 15 Feb 90] .....	35
<b>NORWAY</b>	
Possible Meningitis Epidemic Decline [Hanna Hanes; Oslo AFTENPOSTEN, 16 Jan 90] .....	36
<b>PORTUGAL</b>	
High Incidence of Hepatitis B Virus [Lisbon DIARIO DE NOTICIAS, 14 Feb 90] .....	36
<b>SPAIN</b>	
Spread of African Horse Sickness Continues .....	37
Sparks Controversy [Maria Jesus Villalpando; Madrid EL INDEPENDIENTE, 16 Oct 89] ..	37
Accord With Portugal [Madrid YA, 19 Oct 89] .....	38
Vaccination [Madrid YA, 14 Oct 89] .....	39
Outbreak of Bovine Pneumonia .....	39
Second in Segovia [Madrid YA, 13 Oct 89] .....	39
Guadalix Outbreak [Madrid YA, 19 Oct 89] .....	40
Secrecy Recommended [Charo Rueda; Madrid DIARIO 16, 12 Oct 89] .....	40

Jump in 'Poverty-Related' Diseases 'Worrisome' [Arturo Cenzano; Madrid DIARIO, 16, 2 Jan 90] .....	40
---	----

## SWEDEN

Study Shows Chlamydia Spreading Among Youth [Stockholm DAGENS NYHETER, 20 Dec 89] .....	41
--	----

## UNITED KINGDOM

Salmonella on Rise Despite Preventive Measures [Peter Pallot; London THE DAILY TELEGRAPH, 31 Jan 90] .....	41
Mystery Virus Held Responsible for Infants' Deaths [Peter Pallot; London THE DAILY TELEGRAPH, 26 Jan 90] .....	41
Accelerated Drive To Immunize Infants Planned [Peter Pallot; London THE DAILY TELEGRAPH, 31 Jan 90] .....	42
Winter Flu Epidemic Statistics Given .....	42
Figures Possibly Incomplete [Peter Pallot; London THE DAILY TELEGRAPH, 30 Dec 89] .....	42
Statistics Through Last of Year [London THE DAILY TELEGRAPH, 11 Jan 90] .....	43

## CAMEROON

### 15,000 Cases of Leprosy in 1989

54000028C Yaounde CAMEROON TRIBUNE  
in English 30 Jan 90 p 2

[On the last Sunday in the month of January each year, Cameroon celebrates World Leprosy Day in its own way. Last Sunday, Public Health Minister Prof Joseph Mbede presided over ceremonies marking this day in Cameroon at the "Centre Jamot" Leprosy Settlement.]

[Excerpt] The Minister of Public Health, Prof Joseph Mbede last Sunday in Yaounde presided over ceremonies marking the 37th Leprosy Day with a reminder that leprosy was a disease like any other disease and called on leprosy patients not to feel shy of this disease. [passage omitted]

The leprosy situation in Cameroon has improved greatly. According to recent official figures the number of leprosy patients has dropped from 32,000 in 1978 to 15,000 in 1989 but 40 percent of leprosy cases in Cameroon is still unattended to. [passage omitted]

### Sexually Transmitted Diseases Down; Malaria Up

54000028B Yaounde CAMEROON TRIBUNE  
in English 24 Oct 89 p 6

[Article by Shifu Ngalla for CAMNEWS]

[Text] Sources in the general hospital in Ngaoundere have disclosed that there has been a spectacular drop in cases of sexually transmissible diseases in the area within the past 18 months.

According to a senior staff nurse, Mr Yobidogo Louis-Marie of the emergency ward, only 20 percent of the patients received within that period were suffering from sexually related diseases. He said this was very much unlike in the past when such cases constituted almost a quarter of the patients received.

He cautioned, however, that some victims of venereal diseases still suffer from a certain degree of complex as they consider sexually transmitted diseases as shameful and do not like to consult. While explaining the reason behind the drop of cases of sexually transmissible diseases, he said, the fear of the killer disease Acquired Immune Deficiency Syndrome (AIDS) is largely responsible.

He pointed out instead that within the past 18 months, malaria has become a real cause for concern especially among children, because malaria cases account for 60 percent of the patients registered.

The threat of malaria, according to a senior nurse of the children's ward, Mr Hara Simon, has been counter-balanced to some measure by the near-complete disappearance of measles in Ngaoundere area. He said, for more than one year only five cases of measles have been recorded in the Ngaoundere general hospital.

He expressed the fear, however, that with the approach of the dry season, cases of meningitis could increase among children.

Mr Hara Simon did not elaborate on the relationship between the dry season and the prevalence of the disease.

## ETHIOPIA

### Rinderpest Outbreaks Lowered by Vaccination Program

34000360A Addis Ababa THE ETHIOPIAN HERALD  
in English 7 Jan 90 pp 1, 4

[Article by Makonnen Haile: "Rinderpest Campaign Aims at Vaccinating 80 Percent of Nation's Cattle:]

[Excerpt] The on-going nation-wide rinderpest campaign is aimed at reaching around 80 percent of the cattle population in the country by the time the programme is completed in two years' time, it was disclosed here yesterday.

Comrade Dr Mulugeta Habte Selassie, National Project Co-ordinator of the Pan African Rinderpest Campaign (PARC), functioning under the Department of Veterinary Services of the Ministry of Agriculture, said the objective of the campaign is to control and eventually eradicate the disease from Ethiopia. He said rinderpest is a virus-borne disease, whose mortality rate could go up to 50 percent during an outbreak.

Dr Mulugeta said the campaign was launched in April 1989 and will last for two years, by which time it is believed to bring the disease under control throughout the country. He said the disease has posed as a barrier for the export of live animals from Ethiopia, which has the highest livestock population in the continent and holds 10th place in the world. He said the disease has diminished the country's foreign exchange earning capacity and at the same time acts as a major constraint for the improvement of the livestock industry. He said Ethiopia's cattle population stands at around 28.9 million.

Dr Mulugeta said the outbreaks of the disease have subsided since the launching of the campaign, compared to last year, which witnessed four isolated outbreaks. He said no outbreaks had occurred in the last two months. He said an animal that has been vaccinated will have a life-long immunity. He said vaccinated animals are ear-notched to avoid a re-vaccination.

According to Dr Mulugeta, the campaign is conducted through a network of branch co-ordinating offices, spread across the country. At present there are 64 mobile vaccination teams, that run the campaign assisted by vaccinators, health assistants and veterinarians, stationed in different parts of the country. Comrade Mulugeta stressed that the campaign is not an activity that should be left to the Ministry of Agriculture alone. He said it must be supported by regional administrative bodies, mass organizations and the livestock owners

themselves, who should willfully bring their animals for vaccination, for the eventual success of the campaign.

Dr Mulugeta said the on-going campaign will be followed by a consolidation phase to revitalize the veterinary services, in order to build a strong capacity to carry out a sustained disease control programme. He said the absence of such a programme could result in a reinvasion or reappearance of the disease. He said this will be accompanied by a sero-surveillance component that would help to determine the effectiveness of the vaccination campaign, by detecting the anti-body in the blood of animals.

The on-going campaign forms part of the Pan African Rinderpest Campaign, that was organized under the auspices of the Organization of African Unity and the Inter-African Bureau for Animal Resources (OAU/IBAR). The IBAR is the coordinating agency of the campaign, which, besides Ethiopia, is going on in the Sudan, Burkina Faso, Mali and Nigeria.

The campaign is jointly financed by the Ethiopian government and the European Economic Community (EEC), at an estimated cost of 20.3 million birr. The Ethiopian government will contribute 9.7 million birr, while the EEC will provide 10.5 million birr. The EEC contribution will largely cover the cost of vehicles, equipment, vaccines and laboratory equipment. [passage omitted]

## GABON

### Data on Percentage of Children Vaccinated

54000025A Libreville L'UNION in French  
2-3 Dec 89 p 3

[Excerpts from a speech by Public Health and Population minister Jean-Pierre Okias: "The Health of the Gabonese People Is President Bongo's Major Concern"]

[Excerpts] Commemoration of National Health Day, declared eight years ago, has very special significance in 1989. It falls on the same date as World AIDS Day, which also comes in time to bolster the many activities planned by my department for mobilizing the necessary resources and beginning targeted programs of the medium-term anti-AIDS program. I will thus devote my speech to both of these events.

Promoting the health of the Gabonese people has always been the major concern of the Renovation government and of the president, his Excellency El Hadj Omar Bongo. To show this, I need only review here the main orientations of the country's health policy, revised by the Third Congress of the Gabonese Democratic Party held in September 1986: [passages omitted].

With respect to vaccination, Gabon has succeeded in improving coverage against the target PEV (expanded vaccination program) diseases: over 65 percent of children are fully vaccinated against diphtheria, tetanus,

whooping cough, and poliomyelitis; 68 percent against measles; and 95 percent against tuberculosis. [passages omitted]

## MALI

### More Than 32,000 Cases of Malaria in 1988

54000029B Bamako L'ESSOR in French  
14-15 Oct 89 p 5

[Excerpts from an article by M. Diakite: "Malaria: The Cure Can Be Worse Than The Disease"]

[Excerpts] [passages omitted] In Bamako District, it is malarial attacks (simple form) that are the most common. This, in any case, is what emerges from statistics that note 8,667 cases of simple malaria (or 1,287 for 100,000 inhabitants) compared to 34 cases of neuromalaria (pernicious attacks). And in general terms, malaria was the reason behind 15 percent of physician consultations, six percent of the hospitalizations and nine percent of the deaths in Mali in 1987.

Moreover, in 1988, 32,768 cases of simple malarial fever and 900 cases of pernicious attacks were reported. Nearly 60 percent of the population is now estimated to be infected with malaria: that is, 60 percent of Malians are "healthy carriers" of the falciparum plasmodium. These figures, which according to some specialists do not accurately reflect the reality, illustrate, nonetheless, the scope of the malaria phenomenon in our country.

## MAURITIUS

### Campaign Launched To Replenish Blood Bank

90WE0127A Port Louis LE MAURICIEN in French  
7 Feb 90 p 4

[Article by Dharmanand Dhoocharika: "Medical Service Needs Between 15,000 to 17,000 Bottles of Blood Each Year: Appeal for Blood Donors Launched"]

[Text] Some 15,000 to 17,000 bottles of blood must be collected each year to meet the needs of Mauritian patients. An appeal for blood donors will soon be launched by the Ministry of Health....

Meanwhile, Professor Gerard Cotte, director of the Marseilles Regional Blood Transfusion Center and editor of the medical journal GLOBULE ["Corpuscle"], is in Mauritius to design a program to improve blood transfusion procedures. Dr. Pratibha Ghurburrin, a pathologist with the blood bank at Victoria Hospital, is working with a number of organizations on ways to increase donations. In an interview with LE MAURICIEN, Dr. Cotte said that if Mauritians want to keep their blood healthy they should lead normal lives.

According to this expert, alcoholism and drug abuse are a serious problem for young people in several African countries.



"We have to fight this scourge, because when heroine is consumed it enters into the blood. The use of syringes by high-risk groups is also very dangerous," he said.

Dr Cotte added that blood donors need not be young. An adult between the ages of 18 and 65 weighing 60 kilograms has about 4.5 liters of blood. Such a person can give half a liter without any risk. "Ensuring the quality of the blood used for transfusions is a constant battle, and we must never let down our guard. Equipment must be renovated, quality must be maintained, and we must provide better medical care. The blood must be tested in modern laboratories. This is imperative, because there is no room for error, especially when analyzing donors' blood," he said.

It should also be noted that our medical institutions are highly dependent on public support. According to Dr. Chunnoo, superintendent of Sir Seewoosagur Ramgoolam Hospital, patients [at the hospital] used some 3,000 bottles of blood last year.

#### **Health Ministry Takes Steps Against Disease From Madagascar**

90WE0148A Port Louis WEEKEND in French  
11 Mar 90 p 40

[Text] "The Ministry of Health has taken all necessary steps to avert any possible spread of the endemic plague reportedly prevalent in Madagascar." That is what the Mauritian minister of health, Mr. Jagdish Goburdhun, told WEEKEND yesterday when we questioned him following an AFP dispatch reporting nine deaths in Madagascar from the disease.

The health minister told us that medical personnel at the airport and port had been alerted. Strict surveillance measures were taken, he added, to ensure that freighters coming from Madagascar were inspected by port authorities. The minister said instructions from the ministry were being followed to the letter at the airport, so that the health of passengers coming from the Red Isle is strictly verified to avoid possible transmission of the disease. Questioned about the decision to send our athletes to Madagascar in connection with the 3d "Indian Ocean Games," the health minister replied that he was awaiting a report from WHO [World Health Organization] headquarters in Geneva before making his decision.

It should be pointed out that, according to Malagasy authorities, there is nothing alarming about the present situation, since plague is endemic in the Big Island.

A serious infectious disease, plague is caused by the Yersin bacillus. It is clinically manifested by a bubo or by pulmonary signs and by a serious general state of health.

Endemic throughout the world, especially in Africa, Asia, and Latin America, the pathogenic agent of the disease—Yersinia pestis or Pasteurella pestis—is highly

sensitive to heat, sunlight, and disinfectants, but resistant to cold and able to survive several months at temperatures below 0 degrees Celsius.

Plague, a rodent disease, is chiefly transmitted to man through the bite of infected fleas. Pulmonary plague is transmitted directly from human to human through coughs. But the main carriers of the disease remain fleas and rats.

Though effective treatments against plague exist, specialists prefer more preventive steps to cures. Patients and suspected cases must first be isolated, and then rats and fleas effectively combatted with raticides and insecticides. Moreover, vaccination with living E.V. vaccine (Girard strain) provides effective protection for several months.

#### **MOZAMBIQUE**

##### **Vaccinations End Threat of Childhood Diseases**

90WE0147 Maputo NOTICIAS in Portuguese  
23 Feb 90 p 2

[Report on interview with Dr. Oscar Monteiro, director of the Maputo Center for Prophylaxis and Medical Examinations, by NOTICIAS, date and place not given]

[Text] Such diseases as measles, tetanus, poliomyelitis, diphtheria and whooping cough, which caused the high rate of infant mortality in Maputo City at the end of the 1970's and early 1980's, are no longer a public health threat, Dr. Oscar Monteiro, director of the Maputo Center for Prophylaxis and Medical Examinations, told our reporter, stressing that these diseases are practically under control in this city.

Dr. Oscar Monteiro noted that since the middle of the last decade there has been a considerable annual decline in the number of individuals contracting these diseases, to the point that, for certain diseases, not a single case is being diagnosed.

With regard to measles, which claimed the most victims in Maputo at the beginning of the 1980s, our source explained that this ailment no longer constitutes a danger to public health. From the 250 to 300 deaths recorded annually in that period, the mortality rate declined to only 24 deaths last year.

He noted, for example, that measles was the principal cause of death of the children admitted to the Maputo Central Hospital's pediatrics ward in the early 1980's and that this is not occurring now.

"I feel that measles is about to be eliminated from the list of the 10 diseases resulting in infant deaths and I am convinced that, if the present rate of decline in cases continues, measles could soon disappear, at least from Maputo City," Dr. Monteiro commented.

Regarding tetanus among the new-born, Dr. Monteiro said that 254 cases were reported in Maputo City in 1980

and 198 of them were fatal. In subsequent years the number of cases declined by about half and last year there were only three cases, with one death.

The director of the Maputo Center for Prophylaxis and Medical Examinations said that a seminar on tetanus in early infancy was held last month in Angola, in which health officials representing the five Portuguese-speaking African countries took part, and that much mention was made of the important role played by Maputo City in the combat against tetanus, as reported in a document drafted by the World Health Organization (WHO).

"Within two years we could come to consider tetanus virtually eradicated from Maputo City," Oscar Monteiro stressed, adding that this possibility extends to tetanus cases among adults, where very satisfactory results have been achieved; only seven cases were reported last year, as against 110 cases in 1980.

Regarding poliomyelitis, diphtheria and whooping cough, the situation in Maputo City is even more satisfactory. To illustrate his point, our interviewee gave a status report for each of these diseases. For example, last year there was not a single case of poliomyelitis and not one case of diphtheria has been reported in Maputo City for the last five years. It has also been five years since the last reported case of whooping cough.

Monteiro said that all these successes are owing to the high rate of vaccinations, initiated in 1986 with the launching of the National Vaccination Campaign, which began to involve the entire community in the program and covered neighborhoods and other localities where people are concentrated, including schools.

In this action, according to our source, the district structures, students from some secondary schools in the city and surrounding areas and the mass democratic organizations all played a prominent role in educating the residents to participate in the vaccination campaigns.

## NIGERIA

### Outbreak of Meningitis in Niger State

54000035 Ilorin SUNDAY HERALD in English  
27 Jan 90 pp 1, 6

[Text] Villagers living in Azara community of Mashegu District in Magama Local Government Area in Niger State have vacated their sparsely-populated settlement following the sporadic outbreak of Cerebro-Spinal Meningitis in the area, the News Agency of Nigeria (NAN) reports.

An investigation revealed that the villagers have decided to leave their settlement for fear of being affected by the deadly disease following the reported case of people already affected.

The epidemic, according to the reports at the state Ministry of Health, Minna, has struck two major areas of Kumbashi and Mashegu.

The principal assistant secretary in charge of health, Alhaji Barau Sheriff, told NAN that a medical team had been deployed to the affected communities and that villagers had migrated.

Alhaji Barau said that although there was no medical analysis to determine whether the outbreak was that of meningitis, large quantities of vaccine would be provided to vaccinate the people against the infection.

He said that the village heads in the affected areas had been invited by the council to enlighten their subjects on the need to take vaccination rather than migrating from their original settlement.

NAN reports that smallpox epidemic has equally broken out in Deja community in Zugruma community of the local government.

## SENEGAL

### Lepers in Treatment Number 9,000 to 12,000

54000026A Dakar WAL FADJRI in  
French8 Dec 89 pp 16-17

[Excerpts from an article entitled: "Hope of Being Cured"]

[Excerpts] According to official statistics, there were 40,000 lepers in Senegal in 1960. Today no more than 9,000 to 12,000 are still being treated, 973 of whom are gathered in 11 "reclassification villages," formerly termed leprosariums. An indication, if we accept the figures, that massive work has been accomplished in this area. If current efforts continue uninterrupted, there will be no more than 1,500 patients in five years.

There are four forms of leprosy. First, the indeterminate, early-stage form (three percent of cases). Here the disease manifests itself by one or two clear patches, sometimes numb to sensation. There are no other symptoms at this stage. It is a difficult form to detect; in contrast, it is easy to treat and is cured without sequelae after less than two years of Dds or disolune therapy. The latter is an effective and inexpensive medication (pill-form) discovered around 1950. If leprosy is not treated in time at this stage, however, it progresses to one of the other three forms, such as tuberculoid or borderline, which account for about 70 percent of the leproses in Senegal. The latter can be cured by three or four years of treatment with Dds. Symptoms of the lepromatous form include many red, ill-defined patches or nodules (a sort of wart). [passages omitted].

### Survey of Infectious Diseases, Remedies in Last Decade

54000022A *Dakar SUD HEBDO in French*  
28 Dec 89 p 9

[Article by Saphie Ly: "Diseases of Our Poverty?"; first paragraph is editor's lead]

[Text] AIDS has invaded the airwaves and news columns. Yet it has caused "only" 300 deaths in Senegal in five years. Malaria is curable but still kills, quietly, an unacceptable number of people. Not to mention the other endemic diseases.

Sixty percent of the children who die each year in Senegal are carried off by diseases preventable through vaccination or other simple techniques. Too many adults also die or suffer from illnesses endemic in our regions, but the tiny victims of childhood diseases weigh heavier on the conscience. An immunization program set up in 1978 covered a small percentage of the country. In 1985 Senegal inaugurated a new Pev (expanded vaccination program) strategy that attacked the great diarrheal and respiratory diseases, and the great endemic illnesses in general. The combination vaccine seemed to be the "miracle cure" of the decade. It is a vaccine that prevents seven diseases at once: diphtheria, measles, tetanus, poliomyelitis, tuberculosis, whooping cough, and yellow fever (which Senegal added as an option and that spared it the 1988 Malian epidemic). All are illnesses that our underequipped hospitals had difficulty treating and that young doctors of the 80's now see only rarely. Oral rehydration (Rvo) is an effective and accessible remedy (water, salt, sugar) for diarrheal diseases—an inexpensive solution that required only an educational drive. Malaria is the number-one killer, for there is still no vaccine. Yet preventive measures (nivaquine or others) are simple, especially as the parasite still puts up no resistance to the medication in Senegal.

Neither is there a vaccine for the oldest endemic disease, leprosy, and Senegal has 8,000 lepers. The discovery of an effective medication has nonetheless encouraged patients to come in fairly early, with a real chance of being cured in six months to two years. Leprosy is not deadly, but its social cost is high: witness the number of lepers reduced to begging. Finally, onchocercosis, or river blindness, is especially targeted. Though not deadly either, it is highly incapacitating (blindness) and is rampant in fertile areas, resulting in a socio-economic problem that is manifested by rural exodus. Since 1986, a program to combat the filaria, the worm responsible for this terrible disease, has been in effect in concert with other countries of the subregion. The program in which Senegal participates plans to wipe out neonatal poliomyelitis and tetanus by 1995, to vaccinate 80 percent of the children by June 1990, and to maintain strides already made. It is agreed that an 80-percent vaccination rate will decrease the risk of an epidemic. Although health has improved generally in Senegal, thanks to the support of UNICEF [UN Children's Fund] and other money-lenders, it is still true that many diseases are inherent in

underdevelopment (lack of funds, sanitation, and education problems, etc.). Medicine is the business of doctors, but health is everyone's—doctors, teachers, hydraulic engineers, diplomats—business. Now we just have to roll up our sleeves to make the next decade a decade of better health.

### Hepatitis B Kills Three a Day: Vaccine Tested

54000022B *Dakar LE SOLEIL (Supplement) in French*  
21 Sep 89 p 2

[Article by Fara Diaw: "The Ravages of Hepatitis B"; first paragraph is editor's lead]

[Excerpts] Each day three Senegalese die of early-stage liver cancer, the last chronic stage in the hepatitis B infection. Out of 1,000 Senegalese, 120 will suffer from hepatitis B, which for 12 of them will develop into cirrhosis. Over 85 percent of Senegalese children are or have been in contact with the virus causing this disease.

The number of chronic IHBV carriers in the world is thought to be 300 million. The majority reside in Africa, Asia, the island of Madagascar, Alaska, Greenland, and central Australia, among the aborigines. All are regions in which the disease is highly endemic. Areas of average endemism include Latin and Central America, Europe, countries north of the Sahara, the Middle East, a large part of Europe and Norway, the Sakhaline islands east of the Soviet Union, and the Indian subcontinent. In short, there are millions of carriers on all continents of the planet. [passage omitted]

Unlike AIDS for which there is still no preventive vaccine, researchers of the Tours Medical College in France and of Dakar University have developed a vaccine, HEVAC B. After a mass vaccination-test drive in Niakhar in Senegal, other experiments are under way in Kolda in the south of the country, in Thies and in Pikine. The purpose of these experiments is to integrate HEVAC B into the expanded vaccination program. The sensitivity of vaccination against this fearsome illness has already evidenced itself in high-risk subjects such as health-care personnel, hemodialysis patients, patients undergoing many transfusions (hemophiliacs and leukemia patients), prisoners, the mentally handicapped, newborns, cooperants, soldiers, international travelers, IV drug addicts, homosexuals, prostitutes, and people with multiple sexual partners.

### Degeneration of the Liver

Hundreds, even tens of thousands, of Senegalese are unaware of the existence of this disease that can spread rapidly either among close associates or strangers. Its progression to an early-stage cancer of the liver is ultimately fatal in all cases.

The illness manifests itself by a degeneration of the liver, which no longer filters the blood. As the blood does not circulate well, pressure is brought to bear on the portal vein and the vessels burst.

In central Senegal, in the first vaccination experiment involving 1,000 mothers and 1,500 newborns, 95 percent of the subjects responded favorably and the incidence of hepatitis-B infection dropped. [passages omitted]

### **Cooperation in Battle Against Cattle Plague**

54000026C Dakar *LE SOLEIL* in French  
16 Jan 90 p 9

[Article by Moussa Sadio: "Coordinated Fight in the Sub-Region"]

[Text] Over 20 veterinarians from the border facilities of Guinea Conakry, Gambia, Guinea Bissau, and Senegal met the other week in Kolda to coordinate their efforts in the fight against cattle plague and peripneumonia in their different countries. The mobilization of so much expertise for a meeting of this kind underscores the importance of the subject. It was a far-reaching attempt at cooperation on shared animal-breeding problems, the better to harmonize battle plans.

Governor Seyni Damara, who presided over the opening ceremony, particularly stressed the implementation of health-policing measures. He would like to see monitoring of livestock movements, identification of vaccinated animals at checkpoints, and exchange of epidemiological information all along the borders.

"The coordination of border vaccination drives against cattle plague and contagious peripneumonia must continue to set an example of harmonious subregional and regional cooperation in matters of animal health," emphasized Mr. Seyni Kamara. He then insisted on the threat posed by these two major epizootic diseases—in the past they have exacted a heavy toll from our animal-herding populations that survive along the north and northeastern borders. "It is just as important as in the past to consolidate health gains through the massive immunization of herds against these dread cattle diseases."

In our subregion where good knowledge of these plagues exists, said Dr. Algor Thiam, head of the Kolda Regional Breeding Department, we will have to redouble our battle efforts by giving priority to prophylactic measures and coordinating vaccination drives. That is what it will take to eradicate cattle plague and contagious cattle peripneumonia in Africa, and in our subregion in particular.

### **Identification**

The high level of the debates—which were punctuated by valuable sharing of experiences among brother countries whose relations will continue to be strengthened through cooperation of this kind—produced recommendations capable of ending the scourge of cattle plague.

To harmonize drives, it was decided to vaccinate along the Senegambian border from December to January. During November, vaccination will take place on both

sides of the shared Guinea Conakry/Senegal border. Coordination meetings will be organized in advance to decide on methods.

Also brought out was the need to adopt a uniform system for identifying vaccinated livestock so that unvaccinated animals migrating to neighboring countries can be immediately singled out. The "clover-marking" used in Gambia could be extended to all interested countries. Emphasis was also laid on making vaccination teams mobile, to alleviate the problem of inadequate resources in some countries.

Unilateral vaccination should be avoided as much as possible, failing which the other parties will have to be informed in time. The urgency [of implementing] strict monitoring of cross-border livestock movements was vigorously advocated, not only to stop the spread of diseases from one country to another, but also to combat theft.

Attention was also given to border inspection of food-stuffs and veterinary medications. Improved systems of information and communication between border stations will have to be sought, to promote a flow of animal health information from one country to another. Exchange of activity reports, especially including epidemiological statistics, should be encouraged. Health-policing legislation should also be available for exchange, the better to study possibilities for harmonization.

### **Anti-Rabies Plan**

To monitor and learn more about certain diseases, the veterinarians decided it would be useful to harmonize anti-rabies plans. Epidemiological studies will be conducted on rabies for better identification of the virus's natural reservoirs. In addition, it seemed vital to encourage breeders to organize themselves into producer groups able to carry out profitable activities.

On this point, it would be advisable to think about diversifying the financing sources of the groups created, scaling back the interest rate offered by funding organizations, helping groups distribute their products, and sharing the experiences of different countries, especially in management.

This meeting to coordinate livestock vaccination drives at the borders was organized under the PARC (Pan-African Anti-Cattle Plague Campaign) project, through its coordinating office for western and central Africa.

## **SOUTH AFRICA**

### **AIDS-Like Disease Wipes Out Chickens**

54000033B Johannesburg *THE CITIZEN* in English  
15 Jan 90 p 17

[Article: "AIDS-Type Disease Wipes Out Chickens"]

[Text] An AIDS-type disease wiping out chickens in the Western Cape has reached epidemic proportions, according to a local veterinarian.

A new, more virulent strain of gumboro—not a new disease—is capable of killing up to 60 percent of a particular flock by attacking the chickens immune systems and rendering them susceptible to all other infections.

The vet said the situation looked bleak and he foresaw no real solution to the problem in the near future, as eradication of the disease was left up to individual farmers.

The disease began in the Western Cape last May and has since spread to Natal and the Transvaal.

A Stellenbosch vet said the virus which caused the disease was known and could be controlled by vaccines.

## ZAMBIA

### Southern Province to Launch Malaria Control

54000027B Lusaka *TIMES OF ZAMBIA* in English  
6 Dec 89 p 1

[Excerpts] Southern Province, with the highest provincial figures on incidences of malaria is to launch malaria control management committees at various levels.

Provincial political secretary Cde Winston Kamwana who is chairman of the provincial committee announced this in Livingstone yesterday.

The move was in line with the conclusions of the first national workshop on the control of the fatal disease which was held last month at Kariba in Siavonga.

He pointed out that because of the high rate of mortality due to increased deaths from malaria it was resolved that the exercise be modelled on Universal Child Immunisation (UCI) programme.

Cde Kamwana said the workshop agreed that control committees be formed at national, provincial, district, ward, branch and section levels. [passages omitted]

He said there was need to proceed with the formation of the committees stage so that when funds were received the programme would swing into action. Japan and Iran are likely to fund the programme.

### Cerebral Palsy Cases Caused by Malaria

54000024A Lusaka *TIMES OF ZAMBIA* in English  
18 Jan 90 p 7

[Article: "Malaria Affects 30,000 Children, Says Chigali"]

[Excerpt] About 30,000 children in Zambia are suffering from cerebral palsy, an ailment of the brain caused by

malaria, Zambia Society of Physiotherapy national chairman Cde George Chigali said in Livingstone yesterday.

Cde Chigali said cerebral palsy which came after a serious bout of cerebral malaria caused serious permanent damage to the brain resulting in either paralysis of the hands, limbs, deafness or other disorders.

He said meningitis was another cause of this disease. But the disease had recently escalated to alarming proportions because of under nourishment caused by the high cost of living, making children more susceptible to malaria attacks.

Another factor was that most malaria victims sought treatment late.

Speaking in a Press interview at Batoka hospital, Cde Chigali, a professional physiotherapist, said currently Zambia lacked qualified staff to treat cerebral palsy patients.

He said physiotherapists trained at Lusaka's Evelyn Hone College were not adequately qualified for the job because cerebral palsy was a serious ailment requiring specialist training.

Presently nobody in Zambia had the qualifications required for proper treating of cerebral palsy patients. [Passage omitted]

### Anthrax Outbreak in Munbwa District

#### Humans, Cattle Affected

54000024C Lusaka *TIMES OF ZAMBIA* in English  
18 Jan 90 p 1

[Article: "Anthrax Kills 6 Villagers"]

[Excerpt] Six people and 117 head of cattle have died in Mumbwa district from the highly contagious anthrax disease since the outbreak last December, area veterinary officer Cde John Daka confirmed yesterday.

Cde Daka said in an interview the number of people who might have died from anthrax could be more, about 20, while the number of animals could be high as 200.

Cattle died from the disease in villages but nobody reported the cases to his office for confirmation.

He said out of ten cases reported six died in Chisalu ward while four recovered. Other animals died in Kasulu and 72 in Kapyanga areas.

"We have managed to control cattle deaths but people are still dying from the disease because they still eat meat which they dried and stored after the animals died from the disease," he said.

Cde Daka said a total of 19,959 head of cattle had been vaccinated against the anthrax disease and the exercise

was still going on. The aim of the exercise was to vaccinate about 45,000 animals.

He said drugs were available and transport has been allocated for the campaign.

He explained that symptoms of the disease in human beings were a blister on the skin where the bacteria might have entered causing pain followed by swelling of the neck and the chest. [Passage omitted]

#### Deaths Occur Within 24 Hours

54000027A Lusaka SUNDAY TIMES OF ZAMBIA  
in English 21 Jan 90 p 1

[Text] Nine more people have died from anthrax disease in Senior Chief Shakumbila's area in Mumbwa this month, bringing the total to 15 so far, Chisalu ward chairman Cde Goliath Nkatiko said.

He told visiting Central Committee Member for Central Province Cde Alina Nyikosa that 200 head of cattle had also died from the same disease since October last year.

He appealed to the Government to contain the disease before it claimed more human and animal lives.

"We are appealing to those concerned to prevent this terrible disease which kills within 24 hours of infection," Cde Nkatiko said.

Mumbwa district livestock officer Cde John Daka confirmed early this week that six people had died from the disease and 177 head of cattle had also been struck dead by the same epidemic.

Reacting to the complaint Cde Nyikosa directed area governor Cde Willard Ntalasha and veterinary department officials to launch a political and health education campaign to warn people about dangers of eating animals meat dying from unknown diseases.

The audience which included Senior Chief Shakumbila was advised to report cases of human beings and animals dying from mysterious diseases.

Senior Chief Shakumbila requested for a clinic, grading of the road leading to his palace and provision of transport.

In a memorandum the chief said the existing two health centres were located far away and some people died on their way to clinics.

#### Tsetse Fly Infestation Limits Agriculture

54000027C Lusaka TIMES OF ZAMBIA in English  
29 Nov 89 p 1

[Text] Zambia should not expect to expand her mixed farming potentials as long as the tsetse fly continues to occupy 33 percent of its territory, a high ranking agricultural official has said.

Like most SADCC countries, Zambia could not make extensive economic expansion in agriculture with the scourge of trypanosomiasis from the tsetse fly, said director of veterinary and tsetse control services Dr George Chizyuka.

Addressing the tenth graduation ceremony of the SADCC middle-level training centre for tsetse control staff, he emphasised the need for control measures by qualified staff.

"The increased need to train cadres at this level clearly underscores the importance and urgency of your role if our efforts in controlling tsetse and trypanosomiasis are to achieve results in the region", he said.

The training needs for SADCC countries fell far below the required numbers, he observed.

"You have had an opportunity to attend this course and are a crucial human resource in the battle against this scourge. You should go back to your home countries and disseminate the knowledge you have acquired to your colleagues," he said.

### Department Confirms New Cholera Case

54004052 Hong Kong *SOUTH CHINA MORNING POST* in English 26 Oct 89 p 3

[Text] Another case of cholera was confirmed yesterday by health authorities, bringing the number of outbreaks to six so far this year.

The Department of Health said a 57-year-old man from To Kwa Wan was believed to have contracted the disease during a trip overseas.

He complained of diarrhea, a common symptom of cholera, on October 18—the same day he returned to the territory.

He is being treated at Princess Margaret Hospital and his condition was described as satisfactory.

Of the six cholera outbreaks this year, three have been classified as local. One of the victims died.

Hong Kong has not been declared a cholera-infected area as the cases had occurred sporadically.

Twenty-one Vietnamese refugees on Tai A Chau and Shek Kwu Chau contracted cholera early last month during an outbreak which lasted for a week.

### Outbreak of Diphtheria in Anshan Area

54004809 Beijing *ZHONGHUA LIUXINGBINGXUE ZAZHI* [CHINESE JOURNAL OF EPIDEMIOLOGY] in Chinese Vol 10 No 6, Dec 89 pp 331-332

[English abstract of article by Liang Yin [2733 5419], et al., Angang Medical School]

[Text] This paper reports an outbreak of diphtheria and the result of appropriate preventive and therapeutic measures in Anshan area from Dec. 1984 to Dec. 1987.

This epidemic of diphtheria occurred mainly in a camp of reform labour organization and in a spring sanatorium among a population of young adult people with higher level of antibodies. It was proved that the special infection origin was a strain of nontoxic diphtheria bacilli.

After a combined management including injection of a diphtheria toxoid and an environment disinfection, the incidence of the disease dropped markedly.

### Decrease in Cases of Major Infectious Diseases

OW0502084490 Beijing *XINHUA* in English 0829 GMT 5 Feb 90

[Text] China's capital saw a 28.8 percent decrease, compared to 1988, of the incidence of major infectious diseases last year.

This was the eighth year in a row that Beijing had recorded decreases in the incidence of such diseases, today's BEIJING DAILY reported.

According to statistics, dysentery cases dropped by 42.2 percent as compared with 1988, measles by 65.59 percent, epidemic cerebrospinal meningitis by 56 percent and typhoid by 30.36 percent. There was no recorded case of cholera last year, the paper said.

However, cases of a few other infectious diseases, including hepatitis and scarlet fever, tended to increase last year, the paper said.

### Beijing Airport Opens New Animal Quarantine Station

OW1602091790 Beijing *XINHUA* in English 0730 GMT 16 Feb 90

[Text] Beijing's first modernized animal quarantine station has become operational.

Located west of Beijing Airport, the station covers four hectares and has facilities for accommodating various types of animals.

The station is expected to help facilitate the import of fine breeds of animals and poultry.

At the moment, 520 Australian sheep are in quarantine there.

In the past, animals were quarantined at stations in Beijing's remote areas.

**HONG KONG****Four Cases of Legionnaire's Disease Confirmed**

54004061 Hong Kong SOUTH CHINA MORNING  
POST in English 6 Feb 90 p 1

[Article by Mary Ann Benitez]

[Text] Four cases of Legionnaire's Disease have been confirmed in Hong Kong in the past two months, although the strain appears to be less virulent than others found in Western countries, a university scientist claimed yesterday.

Dr Wong Woon-to, a lecturer in microbiology at the University of Hong Kong, said the four cases occurred independently and did not constitute an outbreak.

All were admitted to Queen Mary Hospital and were treated successfully, he said.

But a spokesman for the Department of Health said it had not received any reported cases of Legionnaire's Disease so far.

The disease, however, is not notifiable and so doctors are not duty-bound to report cases to the health authority.

Dr Wong will make a full analysis of the latest cases as part of a continuing study on the disease. A report will be completed by the end of the year.

He said he could not provide details of the cases as they had only just been submitted to him.

Dr Wong shocked the health community last August after claiming that three cases of the disease had been confirmed in the territory since 1983 amid the government's insistence that the disease had never occurred in Hong Kong.

One of the three died of renal failure last February, a second patient was successfully treated at Nethersole Hospital, while a third patient, in 1983, was infected by the bacteria but did not develop symptoms. All were males, aged over 60.

Dr Wong said he would investigate why the incidences had occurred independently, but said he was not surprised because the legionella bacteria was common in Hong Kong.

Earlier studies have revealed that six out of seven cooling towers in hotels contained legionella, while four of the six commercial buildings investigated had positive identification of legionella in their cooling tower systems.

Dr Wong also found that the cases in Hong Kong were being caused by a strain other than the virulent legionella pneumophila serogroup 1 which has caused fatal outbreaks in the United States and Europe. There are more than 35 bacterial strains causing the disease.

The disease was first detected during an outbreak among delegates at a legionnaire's convention in Philadelphia in the United States, killing 29 of the 182 affected.

**Increase in Cholera Noted; Refugee Found Infected****Fifth Local Case Confirmed**

54004048 Hong Kong SOUTH CHINA MORNING  
POST in English 18 Oct 89 p 2

[Article by Mary Ann Benitez]

[Text] A fifth case of cholera was confirmed yesterday, but health authorities discounted worries that an epidemic could be underway.

The latest patient is a 53-year-old man from Kwai Chung whose condition was yesterday described as satisfactory.

A spokesman for the Department of Health said the case was classified as a local one because the man had not travelled overseas in the past few weeks.

The five cases had occurred sporadically and it was not an epidemic, he said.

The patient had diarrhea last Wednesday and attended the casualty ward of Princes Margaret Hospital the following day. He was admitted to the infectious diseases unit after examination.

The man is the fifth local to have contracted cholera this year.

Three were classified as local cases while the other two were imported, with the patients suspected to have contracted the disease while travelling in China.

One of the patients, an 80-year-old unemployed man who lived in a stone hut in Rennie's Mill, died late last month.

Concern over a possible epidemic was raised when an outbreak of the disease affected 21 Vietnamese boat people staying on the remote Tai A Chau island early last month.

The outbreak was successfully contained after two weeks of disinfection and the boat people were transferred to Hei Ling Chau.

**Police Depot Taking Measures**

54004051 Hong Kong SOUTH CHINA MORNING  
POST in English 28 Oct 89 p 3

[Article by Mary Ann Benitez]

[Text] Anti-cholera measures continued yesterday at a police depot and the Green Island Reception Center after the confirmation of a cholera case.



An 11-year-old Vietnamese boy was yesterday confirmed by the Department of Health to be suffering from cholera.

The boy was among a group of 12 Vietnamese who arrived by boat on Monday and held at the Aberdeen Marine Police Depot. Upon arrival he was found to be suffering from diarrhea and vomiting.

He was admitted to Princess Margaret Hospital where his condition was described as satisfactory. The department classified the case as imported.

All 147 Vietnamese boat people at the depot were later transferred to the Green Island Reception Center where they remained under health surveillance.

The depot was disinfected while the group was examined and given preventive drugs.

A total of 380 boat people from Green Island were earlier moved to the San Yick refugee center in Tuen Mun to make way for quarantine cases.

The department urged members of the public to continue to observe strict personal, food and environmental hygiene to avoid contracting the disease.

Last month an outbreak of cholera hit 21 Vietnamese boat people at Tai A Chau.

So far this year, six local people have contracted the disease, one of whom died.

—Lawmakers agreed at an in-house meeting yesterday to hold another motion debate on the Vietnamese boat people problem on November 20.

Sixteen members indicated their intention to speak at the debate.

The motion, proposed by Senior Legco Member Allen Lee Peng-fei, reads: "This Council urges the British Government to secure as soon as possible, whether through the full implementation of the Comprehensive Plan of Action agreed at Geneva in June this year, or through bilateral agreement with the Vietnamese Government, the urgent mandatory repatriation from Hong Kong to Vietnam of all Vietnamese boat people classified as non-refugees."

## INDONESIA

### Diarrhea Outbreak, Deaths in West Sumatra

90WE0137A Jakarta KOMPAS in Indonesian  
19 Feb 90 p 9

[Text] At least 25 residents of North Siberut Subdistrict in the Mentawai Islands, Padangpariaman Regency, (West Sumatra), reportedly have died following an outbreak of diarrhea and vomiting. The epidemic began during the last month in the isolated islands facing the Indian Ocean.

Although the disease began to subside by the middle of February, several other residents reportedly have been treated for the same symptoms.

When contacted by KOMPAS, Dr Asdi Syah, the assistant regent responsible for the Mentawai Islands, acknowledged that the epidemic was slow in coming to the attention of authorities at the subdistrict and Padangpariaman Regency levels. Because preventive measures were late, a considerable number of deaths could not be prevented.

He also revealed that he had received no report as to precisely when the diarrhea and vomiting epidemic broke out. Based on reports which the South Siberut Subdistrict sent via letter and SSB [single side-band] radio to his office in Padang, however, the outbreak is strongly believed to have occurred during the last month, in January or early February.

He said the North Siberut Subdistrict chief reported by letter that the epidemic occurred in four hamlets, namely Paipajat Hulu and Paipajat Hilir, in Simatalu Village, and Sipokak and Kulumen, in Bojotan Village. The disease took the lives of 20 people, including adults and children under five, in those four locations.

The subdistrict chief reported again on 9 February that the epidemic had spread to several nearby hamlets, where 5 other people died and 10 required treatment. The most recent cases occurred in the hamlets of Kulumen, Sakopak, Masaba, and Suruan, all of which are in the North Siberut Subdistrict.

### Fruit Season

Along with skin diseases and malaria, diarrhea and vomiting is one of the most common illnesses in the Mentawai Islands. The disease and consequent numerous deaths occur there nearly every year. "Cases of it often occur during the fruit season," said Dasril, chief of the North Siberut Subdistrict office responsible for the villages of Simatalu, Sigapokna, and Simaligi.

Dasril, who said he had been in Padang since 13 February on official business at the office of the assistant regent for the Mentawai Islands, confirmed to KOMPAS that deaths from vomiting and diarrhea have occurred since January. "It is true there have been 25 deaths. Cases occurred sporadically over several days."

He added that the spread of the illness in South Siberut is believed to be caused by uncontrolled consumption of fruit by local residents. The first of the year coincides with the season for fruit such as durian, mangosteen, etc. Other factors contributing to the spread of vomiting and diarrhea are inadequate maintenance of residential areas and lack of clean water.

The local government is awaiting aid funds from the regional governments of Padangpariaman Regency and West Sumatra Province for field operations to prevent further spread of the epidemic. Teams are also expected

from health agencies of both regency and provincial governments. "Lack of operational funds and limited support facilities make it difficult for health personnel at subdistrict clinics to work in the field," Asdi Syah said.

North Siberut Subdistrict lies about 81 nautical miles from Padang. The area is accessible by boat from the port of Muara Padang across an often unfriendly sea. The villages where the epidemic has occurred can be reached only by a 2-to-3 day walk from the Muara Sikabalan Subdistrict center.

## LAOS

### Incidences of Malaria in Provinces

#### Champassak Province

54004306A *Vientiane PASASON in Lao*  
17 Jan 90 pp 1,2

[Excerpt] The public health service of Pathoumphon District, Champassak Province checked blood samples from 1,229 people, most of whom lived in remote areas, and found that 6.75 percent had malaria. Public health authorities and doctors in the district's hospitals have sprayed 780 liters of DDT in neighborhoods.[passage omitted]

#### Bolikhamxai Province

54004305A *Vientiane PASASON in Lao* 18 Dec 89 p 1

[Excerpts] (KPL) According to medical statistics from Bolikhamxai Province, more than 10 percent of the province's population are malaria carriers. In examinations recently conducted by medical personnel some 12,000 were checked and nearly 1,400 had malaria. [Passage omitted]

Along with working to treat and examine patients in the grassroots areas, attention is regularly paid to doing a good job of inoculating children which has enabled medical personnel to halt this disease and reduce the numbers of its victims over the past year.

#### Agriculture Ministry Issues Cattle Epidemic Warning

BK0203105990 *Vientiane KPL in English* 0924 GMT  
2 Mar 90

[Text] The Ministry of Agriculture and Forestry last week issued a note to all provinces in the country with regard to early prevention against common cattle epidemics.

The note indicated that last year vaccination was delayed. Thus, only 20 percent of animals across the country were vaccinated. Such a delay was responsible for the high death rate of cattle in several localities, for instance, in Bolikhamsai and Champassak Provinces. As many as 16,500 cows and buffaloes caught the epidemics.

It also suggested that this year rain came so early that the epidemics, such as haemorrhagic septicemia, may seriously occur.

The veterinary services in each locality are recommended that they collaborate with local authorities to promptly conduct vaccination for cattle, especially in areas where these diseases are still prevalent.

## VIETNAM

### Inefficiency Blamed in Malaria Deaths

54004304 *Bangkok THE NATION in English*  
1 Jan 90 p 2

[Text] Poor work by local Communist Party officials contributed to the deaths of 25 people infected with malaria this year in a northern province of Vietnam, Radio Hanoi says.

The broadcast said that since early 1989, as many as 25,600 people had contracted malaria in Hoang Lien Son province, which borders China. Of these, 25 died because of a lack of timely treatment, it said.

The poor performance of grass roots Communist Party committees and local government agencies was cited as one reason for the malaria outbreak. Other causes were unhygienic practices by many families, shortages of mosquito nets and medicine, and reliance on quack remedies, the radio said.

"Moreover, the local public health service's work has been woefully deficient.... The village health stations system exists in name only, without any practical activities," the official broadcast said.

"People live in difficult conditions, have no money to buy medicine and dare not go to the hospital because they cannot pay medical fees," said the Friday broadcast, a transcript of which was made available Sunday.

## COLOMBIA

### State of Emergency Prompted by Dengue Fever

90ET0102A Bogota SEMANA in Spanish  
23 Jan 90 pp 52-53

[Text] Just when they had returned from their vacations Colombians were met with the disturbing news that, besides their suntans and arts and crafts, they might also have been carrying a dangerous virus: hemorrhagic dengue. The warning issued by the authorities through the media triggered considerable panic attacks among those who had spent the New Year's holiday in warm climates, considered danger zones. Despite the scare and shock, 3 days later it was confirmed that only one case of hemorrhagic dengue had shown up in the country thus far. The outbreak, which was expected to occur in the zone bordering Venezuela, appeared in Puerto Berrio, Antioquia. It involved a 12-year-old girl who was admitted to the St Vincent de Paul Hospital in Medellin on 2 December. Thanks to timely medical treatment, the child is out of danger.

The reason for the intensity of the campaign is that this potentially fatal form of the disease, which is transmitted by the bite of an infected mosquito, has already taken a toll of many victims in Venezuela. The threat of that epidemic prompted the Colombian health authorities to declare a state of emergency in the national territory. According to estimates made by the Health Ministry, about 18 million Colombians inhabiting the warm and temperate zones are exposed to contracting the virus. Dr Jorge Michelsen Rueda, director of the National Institute of Health, comments: "The purpose of this massive prevention campaign is to make the citizens aware of the urgent need for adopting the recommended measures to prevent the spread of the virus."

Over the past several years the country's warm zones have become a breeding ground for dengue. During the last decade this viral disease, typical of tropical zones, has reached epidemic proportions in some areas of the country. In 1979 there was an outbreak of common dengue on the Atlantic Coast which struck nearly 500,000 persons. Now, however, it is making its appearance in Colombia only in its most aggressive form: hemorrhagic dengue.

The transmitting agent is a mosquito (*Aedes aegypti*) which breeds in warm and tropical zones (below 1,500 meters above sea level); in other words, 60 percent of Colombian territory. Unlike the anopheles mosquito, which reproduces in stagnant water, *Aedes aegypti* is highly domesticated and can reproduce in "clear" water. This means that anything from holy water fountains to swimming pools, including flowerpots or tanks, could become a breeding place for its larvae.

Currently four serotypes of the virus are known, and all four varieties can produce hemorrhagic dengue. The virus has an incubation period of from 5 to 15 days and, if not detected and treated in time, can have fatal

consequences. It attacks the coagulation factors in particular, triggering hemorrhages in various organs, especially the skin and mucosa. According to data from the World Health Organization its main victims are children and the elderly. Specialists in tropical medicine have not yet been able to determine which immunological factors intervene causing some individuals to develop the hemorrhagic fever syndrome while others manage to escape this dangerous form of the disease. It is thought that one of the risk factors is contracting it for the second time. Dr Michelsen notes: "It has been observed that this malignant form is more common in those who have been infected previously with common dengue."

The existence of all four varieties of the virus in Colombia alerted the authorities to the high risk of an appearance of the hemorrhagic dengue that has been circulating in the Caribbean, and Central and South America, for several years. In 1981 there was an epidemic in Cuba that affected 350,000 persons. Despite an active prevention campaign, nearly 2,000 died. There have also been outbreaks in Puerto Rico, Mexico, and Brazil (see SEMANA, No 3830). Last November it appeared in Venezuela, showing epidemic features there 2 months later. The neighboring country's health authorities claim that over the past few days 200 cases have been reported daily. Of the 3,500 persons infected with the virus, 53 have already died.

According to the experts the two most important factors in the spread of the disease are the population's mobility and the lack of health control in urban areas. If a traveler who has been infected, and yet does not show any symptoms, is bitten by a mosquito at the site of his destination, that insect is then a carrier and propagates the virus. Moreover, stored water is a propitious place for breeding larvae. It is on these two fronts that the prevention campaign has been started in the country. The Health Ministry has ordered control and disinfection in ports and land frontiers bordering Venezuela, and at air and ocean terminals. The National Institute of Health, an entity that performs the examinations attesting to the cases reported, has begun fumigation programs in high risk zones through its local offices. But the fact is that 90 percent of the success of this campaign depends on strict compliance on the part of Colombians with the prevention measures, and on early detection of infected persons. And apparently the best way of preventing the spread of the virus is to abide strictly by the saying, "let any water that you don't have to drink run."

### Prevention Is Better

#### High Risk Zones:

Zones bordering Venezuela and Guajira, Cesar, Vichada, Arauca, Guainia, Llanos Orientales [Eastern Plains], and the Santander.

Atlantic and Pacific Coasts.

Magdalena and Cauca River valleys.

**Danger Signals:**

High fever, headache; eyeball, muscle, and joint pain; fine rash on the skin and itching. Added to these symptoms typical of common dengue are: lowering of blood pressure, cold skin, and various hemorrhages or bruises on the skin.

**What To Do:**

Do not take analgesics or aspirin. Acetylsalicylic acid affects coagulation and could worsen the condition.

Go to a medical center immediately.

Any outbreak of the disease must necessarily be reported to the health authorities.

**Preventive Measures:**

Collect and eliminate waste materials or any receptacle in which water could accumulate, such as tires, pots, jars, and bottles.

Turn all bottles and flasks upside down.

Change the water in flower pots, aquatic plant containers, and animal drinking troughs daily.

Cap storage tanks containing water for household use.

Refill puddles or ditches near dwellings with earth or sand.

Drain places in which water accumulates, and clean canals.

Clean swimming pools, ponds, or water tanks weekly.

Place burlap over doors and windows.

Use protective mosquito netting and repellants.

Fumigate with residual action insecticides.

**GUATEMALA****Measles Epidemic Spreads Throughout Country****Mutated Measles Virus Suspected**

90WE0113B Guatemala City PRENSA LIBRE  
in Spanish 14 Jan 90 p 6

[Text]

**Error Noted**

Dr David Prado Cohrs never claimed that the public health authorities have not adopted any measures to halt the increase in measles cases, as appeared in the first part of this interview yesterday.

Dr Prado Cohrs stressed that his opinion is a personal one, and does not represent any of the institutions in

which he works. He claimed not to know about the detection and control efforts that the authorities have put into effect.

**Reason for the Rise in the Epidemic**

Dr Prado Cohrs remarked: "As some colleagues have noted, I agree that there might have been problems with the handling of the vaccine, causing a possible lack of effectiveness. The vaccines may have been exposed to heat or light, or there may have been problems related to the ages of children who were vaccinated at a very early age, without subsequent vaccination."

The physician noted: "However, there may also be a third explanation for why the last vaccination campaign was not effective because, besides the fact that no importance was attached to it, there is a possibility that the measles virus has changed or undergone a mutation. This would change its characteristics, making it a somewhat different measles virus, more aggressive and more virulent than the type in the past.

"It is certainly strange that there should be epidemics in Houston, in the United States, or in Canada, where the vaccination programs have been carried out very meticulously. Then why has the epidemic occurred? It may be that this virus has changed over the past few years and, because of the change, the vaccine will not be as protective as it was in the past." The epidemiologist emphasized: "There is no scientific proof of this, but I think that we have to keep an open mind toward this possibility."

**Latent Problem in Guatemala**

"This epidemic is latent in Guatemala. I think, first of all, that when a person has measles he transmits it through his infected respiratory secretions. Of course, if there is a child in the house with this disease and there is also a very young infant there, it is advisable that there not be any close contact with the sick one," the doctor recommended.

Dr Prado Cohrs explained: "Furthermore, the family that has children with measles must seek medical assistance. It has been proven that the measles vaccine can protect shortly after contact. In other words, if your child has not been vaccinated and is in contact with a little friend who has measles today, your child could still be protected by giving him a vaccination today, or tomorrow at the latest."

**Hospitalized Patients**

Dr Cohrs added: "Most of the patients that we have been hospitalizing come from marginal areas of the capital city, and some are from towns adjacent to the capital. However, we are not receiving patients from the outlying sections of the country. It is a problem in the capital, in addition to the outbreak of this disease elsewhere in the country."

He commented: "Of the children that we are treating in the capital's hospitals, 50 percent are under age 2, and the vast majority are less than a year old. Nearly half of these hospitalized children have had problems, because there have been complications from their disease."

### **2,400 Cases Reported**

90WE0113A Guatemala City EL GRAFICO in Spanish  
23 Jan 90 p 10

[Text] At a press conference, Dr Carlos Gehlert Mata, minister of public health, disclosed that the number of measles victims in the epidemic that has spread throughout the country has increased alarmingly, both in cases of the disease and in fatalities.

The official noted that about 2,400 cases of measles have already been discovered in Guatemala, according to reports received. But the number could be larger, because all of the country's reports have not yet been obtained.

The minister claimed that the number of deaths totals approximately 200 persons, including children and adults.

The public health minister stressed that measles is an international problem. The epidemic currently facing Guatemala has been affecting many countries on the American continent, including the United States. The minister added that there have been over 10,000 cases in that country alone.

The official remarked that the outbreak originated in South America, later reaching some Central American countries, such as El Salvador. In the latter country alone, during the second half of last year there was a death toll of many hundreds, especially among children.

The public health minister said that Guatemala is carrying out an intensive vaccination campaign to combat measles. He claimed that not one of the 250,000 doses of vaccines available is left in storage, because they were all distributed in the country for a campaign to vaccinate children aged 5 to 15.

### **Epidemic Described as "National Emergency"**

90WE0124A Guatemala City EL GRAFICO in Spanish  
27 Jan 90 p 2

[Text] Yesterday, both the World Health Organization and the Pan-American Health Organization (PAHO), as well as UNICEF, described the situation of the measles epidemic prevailing in Guatemala as "a national emergency."

According to a statement made yesterday By Dr Carlos Gehlert Mata, minister of public health, this epidemic has already caused 390 deaths among adults, adolescents, and children.

The minister was accompanied at the press conference by Dr Agop Kayayan, a UNICEF representative, and Dr Antonio Casas, representing PAHO.

It was also attended by the Brazilian doctor, Cristina Da Cunha, a biologist for WHO and PAHO, and Dr Juan Aguilar, a regional consultant on primary health care from UNICEF.

The officials attending the meeting claimed that the measles epidemic in Guatemala is not a result of the poor quality of the vaccine used during the inoculation campaigns.

Nevertheless, they admitted that, in any vaccination, there is always a margin of 10 percent of children who, for one reason or another, are not left immunized. They maintained that no vaccine anywhere has 100 percent effectiveness.

However, they added that, insofar as the vaccine used in Guatemala was concerned, it could be claimed to have reached the selected sites under optimal conditions, and none of it could have been "outdated," as has been claimed.

Dr Kayayan said that Guatemala's situation with measles is not isolated, because this problem exists in other countries. There are even several countries in Latin America that have been stricken.

Dr Aguilar asserted that cases of a measles epidemic breaking out usually occur in alternate years; in other words, it reappears a year after vaccination. In the case of Guatemala, however, he noted that the last epidemic of this disease occurred 7 years ago, and there had been some epidemics in previous years.

In conclusion, he remarked that the international health organizations are lending Guatemala financial and technical support in this emergency that has arisen with measles.

## **HONDURAS**

### **300 Confirmed Cases of Dengue**

90WE0065C San Pedro Sula TIEMPO in Spanish  
17 Nov 89 p 23

[Text] Public Health officials reported yesterday that out of a total of 886 reported cases of dengue, over 300 have been confirmed nationally. The city of San Pedro Sula has been the hardest hit with 60 percent of all cases.

Dengue is an acute disease that causes severe headaches, fever, loss of appetite, and pain throughout the body. It is caused by the aedes aegypti mosquito that breeds in stagnant water, tires, and bottles.

Tegucigalpa and Comayagua are sources of proliferation of the carrier, with over 35 districts and suburbs, most of them poor, in danger of rapid disease spread if

the carrier mosquito is not eliminated, said Dr Eladio Ucles, director of the metropolitan region.

Ucles added that of the 385 cases studied in the capital, only 9 have been confirmed clinically, but officials have not ruled out the possibility of more cases based on analyses.

In addition, he said that there are three types of virus that could produce dengue in the country. However, officials have ruled out the possibility of hemorrhagic or fatal dengue since only when an individual has previously had dengue can he be susceptible to the mosquito that carries hemorrhagic dengue, which has not reached Honduras.

Authorities from the Carrier Division said that the aedes aegypti mosquito is resistant to the insecticide sprayed in districts and suburbs. Consequently, the people must eliminate any stagnant water and keep faucets and reservoirs clean.

They said that starting yesterday, the Carrier Division had begun to spray districts and suburbs of the capital most affected by mosquito eggs and larvae.

For his part, Dr Jose Oqueli, deputy minister of health, said that dengue prevention is not the sole responsibility of his ministry, but of every individual in terms of basic hygiene at home.

### **TB Annual Death Toll Hits 250**

*90WE0065B San Pedro Sula TIEMPO in Spanish  
20 Oct 89 p 19*

[Text] An average of 250 persons die in Honduras of tuberculosis and its complications every year, despite the continuing work of the National Disease Control Program, reports Dr Maria Elena de Rivas, head of the program.

Given the need to control the incidence of over 2,500 cases reported annually, the National Tuberculosis Commission was set up yesterday by Dr Ruben Villeda Bermudez, minister of health.

Villeda said the purpose of the commission is to control tuberculosis in medium-range terms, providing advice to the disease control program on technical and epidemiological aspects.

The commission is made up of the head of the program, the chief of epidemiology, the head of the ministry's laboratory, and representatives of the Honduran Social Security Institute, School of Medicine, Medical College, and different health associations.

Poverty, the housing shortage, and access to health services are all factors contributing to the incidence of the disease, said Luis Loyola, representative of PAHO [Pan American Health Organization]- WHO.

Loyola said that tuberculosis is a "white plague" that attacks the entire world, but that is more common in

poor countries. Underdeveloped nations report over a million cases and 500,000 deaths annually.

Rivas said that more funds have been allocated this year to control tuberculosis and other infectious diseases, but that the program itself spends an average of 800,000 lempiras a year for control and treatment.

He also noted that the entire country is affected by the disease, with 50 percent of the population likely to suffer from it. However, individual defense mechanisms are decisive.

Rivas said that to date, the regions most affected are the Departments of Santa Barbara, Yoro, Cortes (mainly San Pedro Sula), Colon, and Atlantida.

### **Guillain-Barre Syndrome Affects 150**

*90WE0121A Tegucigalpa EL HERALDO in Spanish  
2 Dec 89 p 3*

[Text] This year over 150 cases of general paralysis have been detected at Mothers and Childrens Hospital. The scientific name of the disease is Guillain-Barre syndrome, and it is as dangerous as poliomyelitis, according to a statement made yesterday by the chief of that treatment center's Pediatrics Department, Francisco Cleaves.

The disease begins with paralysis of the lower extremities, and advances toward the upper limbs, later attacking the respiratory muscles. When the final stage is reached, the patient requires artificial respiration; however, the problem has been exacerbated because of the lack of respirators or ventilators at Mothers and Childrens Hospital.

There are only two respirators at Mothers and Childrens Hospital at present, an insufficient number to treat the children showing respiratory complications. Therefore, some are dying of asphyxia.

The disease attacks persons of all ages. When in an advanced stage it attacks the nerve endings, causing paralysis of the nerve muscles and the upper and lower extremities. This puts the patients in a vegetable-type state.

At the onset of the disease, in 95 percent of cases the symptoms begin in the lower extremities. When the illness is advanced it affects the brain and the brain stem, causing death in many instances, according to Cleaves.

Dr Cleaves maintains that there is an outbreak of this disease at present, which is difficult to combat because of the lack of respirators. Respirators enable patients to survive the respiratory crisis.

There are currently five children who are not overcoming their critical condition, some having had the disease for 3 months.

Cleaves noted that constant requests have been made for the purchase of at least five ventilators; however, there

has been no response from the Ministry of Public Health. The lack of medical equipment is attributed to the shortage of foreign currency, because each machine costs nearly \$30,000.

One of the ventilators that the Teaching Hospital has was discarded by an Asian country. Because of the need for medical equipment, the Honduran Government had no alternative other than to accept it.

Dr Cleaves remarked that, on occasion, Social Security cooperates with Mothers and Childrens Hospital, transferring patients with complications to the intensive care unit that it has available.

## Measles Epidemic; Immunization Plan Discussed

### Children Mainly Affected

90WE0065A San Pedro Sula LA PRENSA in Spanish  
8 Nov 89 p 23

[Text] A total of 77 persons, most of them children, have died of measles this year, according to Jorge Melendez, head of the Ministry of Health's Department of Child Care, who added that 5,421 cases have been reported.

Melendez said that the epidemic is not yet under control but that the situation is beginning to return to normal since the incidence of the disease is dropping.

The epidemic began in August and September, with the largest number of cases and deaths recorded in San Pedro Sula, Olancho, and Tegucigalpa.

The disease has mainly affected children under the age of 5, with fewer cases reported in adults.

Melendez said that 27 cases of measles were reported last week. The disease requires proper care because complications can cause death or, even when cured, affect growth and development.

Melendez explained that the 5,421 cases occurred after the month of January and that 57 of the 77 deaths resulted from the epidemic.

Olancho has had the highest number of cases with 1,400, followed by Tegucigalpa with 1,002, and Danli and part of Mosquitia with 673.

### 92 Dead in 1989 Epidemic

90WE0103B San Pedro Sula TIEMPO in Spanish  
18 Dec 89 p 22

[Text] The illnesses which have caused the largest numbers of deaths this year have been measles, with 92 victims, and tetanus, with 17, according to Dr Ricardo Kaffie, head of the Mothers and Infants Division at the Ministry of Health.

He added that there was only one victim of poliomyelitis in the whole country, and the majority of the children who died had not been vaccinated against these preventable diseases.

The 17 deaths from tetanus were mainly reported in the city of La Ceiba and its environs, while measles mainly affected the cities of Tegucigalpa, Comayagua, Danli, a part of Olancho, and Choluteca.

On the subject of vaccination coverage, Kaffie said that the vaccine most widely administered was the Sabin vaccine against polio, with 91 percent coverage, and the vaccine against diphtheria and whooping cough, with 85 percent coverage on the national level.

On the other hand, he said that the coverage for the toxoid vaccine against tetanus given to women of child-bearing age was only 63 percent, although this was better than the level of 30 percent achieved the preceding year.

Kaffie explained that the goal of the Mothers and Infants Division is to reach a minimum of 80 percent in general coverage in the immunization programs.

He said that measles caused a greater number of deaths in 1989 because many parents failed to bring their children to be vaccinated, which resulted in the epidemic which broke out last September. During this epidemic, 5,400 patients contracted the disease and 92 died, the majority being infants under 1 year of age.

### 120 Deaths Reported

90WE0122B Tegucigalpa LA TRIBUNA in Spanish  
25 Jan 90 p 8

[Text] According to a statement made yesterday by Jose Enrique Zelaya, from the Public Health Ministry's Epidemiology Department, measles is spreading throughout the country to an alarming extent, with a marked index in the northwestern zone, and 6,200 cases and 120 deaths have been recorded since July of last year.

Zelaya made this comment at the Leonardo Martinez Hospital in San Pedro Sula, adding that the epidemic is continuing its fatal progress despite the efforts being expended by the Health Ministry to check it.

He announced that the Public Health Ministry is planning a massive vaccination campaign on the national level next month, with major emphasis on the outlying and border zones, and that there is already a sufficient number of vaccines on hand for this purpose.

These assertions contradict the numbers in the communique issued by that ministry, stating that during 1989 6,353 cases were reported, and 125 persons of all ages died as a result of the epidemic's outbreak.

Nevertheless, the official added that the country's immune system is being reinforced, and that it is hoped that the population will cooperate with the massive campaign that has been announced.

## BANGLADESH

### Task Force Studies Resurgent Fish Disease

54500057 Dhaka THE BANGLADESH OBSERVER in English 7 Jan 90 pp 1, 12

[Text] Fisheries and Livestock Minister Mr. Sunil Gupta said the 10-member task force formed by the Fisheries Ministry could not identify the fish disease and its cause.

Addressing a Press conference at Matshya Bhaban on Saturday noon the Fisheries Minister said about 8,439 tons of different varieties of fish worth about Taka 17 crore was damaged by the undetected disease in 1988. The quantum of damage in 1989 (both in tons and taka) is under survey and is likely to be higher than that of 1988.

The Fisheries Minister said some measures may be taken to contain the disease in ponds and canals but it is not possible for the government to stop it in the flowing waters of different rivers.

In reply to a question the Minister observed that the 10-member task force formed in August 1988 and headed by Mr. Mohammad Asadur Rahman, Vice Chancellor Bangladesh Agriculture University, has no positive achievement. However, the task force members, meanwhile, visited different affected areas of the country and advised the government and members of the public that the "ulcerated fish" are "harmless" and can be consumed "safely." The activities of the task force will continue as an advisory body of the Fisheries Ministry to detect the fish disease and find its cure.

Mr. Lutfullahil Majid, Secretary, Ministry of Fisheries and Livestock, task force members including its chief Prof. Asadur Rahman and the Director General Fisheries Department were also present at the Press conference.

Mr. Mohammad Asadur Rahman in his written statement said a number of investigations have recently been initiated in Bangladesh but the knowledge of the causes of the disease was dependent mainly on the preliminary findings of an ongoing major international coordinated project based at NIFI, Bangkok.

He further said although a number of potentially pathogenic organisms—bacteria, fungi, external parasites, virus associated with the ulcerative diseases have been identified, yet none of them can definitely be considered to be the primary causative organism. It may be mentioned that etiology of the disease actually involves a multiple pathogenous interaction rather than a single pathogen, he added.

The task force chief said the ulcerative syndrome termed by the scientists as an ulcerative disease, broke out in Dhanagodha under Matlab Upazila of Chandpur district in January 1988. Later it spread in an epidemic form across the country. The disease appeared to be contained

to an extent for a few months in the current year, but again it spread throughout the country recently.

He said the disease first broke out in Queensland, Australia and later travelled 14 countries in the Indo-Pacific region.

## EGYPT

### Leprosy Remains Problem; 50,000 Cases Recorded

90WE0117A Cairo AL-JUMHURIYAH in Arabic 30 Jan 90 p 3

[Article by Jirjis Hilmi 'Azir: "When Will Leprosy Disappear? Egypt Has 50,000 Cases When Europe Has Totally Eradicated the Disease"]

[Text] Egypt will participate in International Leprosy Day scheduled for 18 February. Dr. Mamduh 'Azmi Ya'qub, a physician who volunteered to serve lepers, is making arrangements for the celebration. Preparations are taking several forms including training seminars for physicians to be conducted at the Tanta school of medicine by Dr. Wafa' Ramadan, chief of dermatology; at the Asyut school of medicine with Indian-born international expert Lissom Vitom, professor at West Germany's Hansen Institute; and at the Alexandria school of medicine in participation with Dr. Yusuf Wahba. He also helped prepare educational programs for grassroots leaders at the Suhaj governorate in participation with Mr. Majdi Mufid Jaras, sociology expert with Caritas-Cairo.

All this activity is carried out in cooperation with the Leprosy Eradication Department of the Ministry of Health, headed by Dr. Salwa Muhammad Kamil.

Dr. Mamduh says that society had an unfair view of its 50,000 lepers and that view was sustained by the fact that the disease may be hereditary or transmitted by nose secretions. The disease essentially affects the epidermis and nerves and manifests itself as pale pigmentation or causes distortion of the skin's normal feeling of hot and cold, touch, and pain. It could also afflict the eyes.

Leprosy and its complications has recently responded to treatment with drugs, natural healing, corrective surgery, and artificial limbs. Scientists continue their search for a vaccine.

Lepers are placed in colonies similar to holding camps. Specialized societies' understanding of those patients has undergone change and they may now be treated at public and specialized hospitals without need for colonies that destroyed their hope of ever leading a normal life. Centers for social care and training, most of which are charitable and humane institutions, have been established at Asyut, Shibin al-Kawm, and Abu-Za'bal.

Professor Dr. Colin MacDougal, considered the leading world authority on leprosy, visited Egypt recently to lecture Egyptian physicians at their meeting places on



the latest methods of treatment. Dozens of young physicians attended in hopes of controlling this disease which has been totally eradicated in Europe where it was common in the Middle Ages. The high economic, social, and hygienic standard of living has played a major role in eradicating the disease which still claims 15 million throughout the Third World.

### **Poultry Market Suffers Due to Virus**

90WE0128A Cairo AL-HAQIAH in Arabic  
6 Jan 90 p 4

[Article by 'Affaf 'Abbas: "Marek and Gumboro Diseases Destroying Poultry"]

[Text] The Gumboro disease and Marek's disease [as published] that fatally affect poultry have recently been spreading. The diseases came to Egypt from certain other countries, most notably Israel. Farmers have not been going to the specialized centers because of the diseases' spread. Moreover, foreign vaccines have failed to extirpate them.

Muhammad Marghub, a poultry breeder, said, "This year I have suffered big losses as a result of a serious disease attack against the poultry farm that I own in Abu-Za'bal. Because of that, I have decided to give up chicken breeding until after the disease has been eliminated in Egypt, or until we find a vaccine for it that will finish it. My farm is not the only one hit by this problem; most of the farms in the republic have suffered. The use of vaccines has not had any positive result, because the sickness rapidly kills all the chickens. The result has been that a large number of farms have stopped operations."

### **Decreased Production**

Sami 'Alam, director of the Arab Poultry League, and a poultry breeder, said, "Gumboro or Marek's disease are both serious diseases which lately have been affecting poultry. Gumboro attacks the birds only at an early age. When the birds are afflicted with it, their immunity against other diseases decreases, which leads to inflammation in certain glands. This disease has been known in Egypt before, but the infectious virus was weak and caused little economic damage. For the past three months, the manifestations of this disease have grown stronger than we have known in past years. Losses in past years were three percent; this year they have risen to 70 percent on some farms, because of the appearance of other diseases due to the chickens' inability to ward off these diseases. The percentage of deaths increased from 10 to 50 percent."

He added that this disease threatens poultry production because it appears close to marketing time, when the chickens are 45 days old, a short time before being sold. This results in heavy losses for the farmers as a result of not marketing the poultry and increased production costs, which ultimately will lead to cessation of poultry breeding until the disease disappears from Egypt. Marek's disease is marked by tumors that appear in the

birds at a later age. It attacks the day old chicks, but its signs do not appear until two to four months later. This costs the breeders dearly. There was a mild outbreak of the disease in 1980, but it has begun to intensify recently. It also attacks the farms that breed layer hens, and Marek's disease threatens the egg industry.

### **Contagious Disease**

With regard to Gumboro, it threatens the production of meat of "fattened" chickens. The first disease is found in epidemic proportions in local layers, in the al-Baladi and Fayum areas, as a result of a lack of immunization against this disease. In turn, this has resulted in its increased spread and in heavy losses for the breeders of layers.

### **The Cause!**

Dr. Sami 'Alam confirms that the cause of the spread of these diseases was the importation of infected birds into Egypt. These diseases spread widely in southern Europe, Israel, Syria, and Lebanon. There are borders between us and Israel and Jordan, but the diseases were transmitted to us over them, because the first governorate in which they appeared was the governorate of Sinai.

Moreover, the disease shows that imported drugs and vaccines have little effectiveness. "I as a breeder am suffering from these diseases. I advise breeders to take the necessary precautions, such as disinfecting and prevention, by following a program of intensive immunization against these diseases during this very period after the spread of the two diseases."

Dr. Muhammad al-Hamid Shalbi, director of the Analysis Center in the College of Veterinary Medicine, says, "The college established the center to solve the problems of the environment, and after the problems of poultry diseases worsened, work in the laboratory began during last October, in support of the idea that universities are not only educational resources, but are also repositories of expertise. The center's services helped in certain governorates, such as al-Mansurah, Bani Suwayf and Port Said. After receiving farmers' complaints about the deaths of chickens, veterinarians went to farms to offer comprehensive services through diagnosis and administering the required vaccines at a nominal cost." He added that the center held training courses for veterinarians for 150 Egyptian pounds, and he pointed out that the support of laboratory and scientific equipment would result in finding a way out of the crisis that threatens the poultry industry. He said that veterinary pharmacies must be established, which could provide good vaccine specimens to protect the consumer from fraud, especially from unregistered laboratories. The Veterinarians' Union does have a law about establishing veterinary pharmacies, but until it is promulgated, the establishment of new unregistered laboratories must be stopped. The Ministry of Health and the Veterinarians Union have registered laboratories to track the disease's spread by scientific means, in order to solve the crisis.

### Drop in Production

Dr. Diya' al-Din Jad-al-Haqq, assistant professor of poultry diseases in the College of Veterinary Medicine said that the misdiagnosis of the poultry diseases led to a drop in production, especially when they identified Gumboro disease as "al-lydz," as well as through not utilizing specialists in scientific methods. All of that led to ascerbating the problem. Dr. Diya' al-Din pointed out that the transmittal of the infection was by way of Israel, and the laboratories were unable to identify correctly certain diseases, especially with regard to live or frozen imported poultry, and the poultry diseases spread rapidly. The veterinarians who are working with these slaughtered birds transmit the infection to other birds. In this situation, if the laboratories were capable, it would be impossible for these diseases to enter. Moreover, importation of feed components also contributed to the spread of the diseases. The feed contains certain diseases, and also transmits fungal poisons to man. He cited the need for an agricultural ban against importing this feed.

### Economic Losses

Dr. Mustafa al-Bustami, assistant professor of poultry diseases at Cairo Veterinary College, said, "In recent years, certain contagious diseases have appeared that were not seen in Egypt before. The results have been heavy economic losses. The diseases include Gumboro, which has caused the death of 30 percent of the chickens, causing a disaster for the breeders. Although there are imported vaccines for this disease, their potency is weak. An evaluative study is currently underway in the college with regard to the extent of the imported vaccines' effectiveness against this disease. I would therefore caution breeders against small service units located throughout Egypt, because they are on a primitive level. It would be better to consult a medical specialist in poultry diseases, especially in cases of intensive breeding by farmers, because these centers just serve the small breeders at home.

Dr. Muhammad 'Amr, assistant professor of poultry diseases at the college, said that the college offered antipoultry disease courses. "The problems that poultry face can be solved by sound diagnosis and ideal utilization of poultry vaccines, in order to curb the spread of the viral disease. One should also select the proper [anti-] bacterial, fungal, and parasitic drugs, and have a sound system of prevention."

Dr. 'Affaf Amin, head of the poultry department at the Center for Animal Health Research said, "We advise the farmers to use the required drugs and vaccines. The most important disease at present is Gumboro. It has now been isolated, and we are in the process of extirpating it. It has been confirmed that it is a contagious disease, and several factors have lead to its spread, including no immunization against the disease, or rather, erroneous immunization, and erroneous times of immunization.

### Strong Virus!

Dr. Nabil Taniyus, a professor at the center, added that the Gumboro virus is very strong and causes a 60 degree centigrade temperature. Therefore, it is difficult to survive it. In addition, the imported drugs have little effectiveness. Dr. Intisar Ahmad of the Center of Animal Health Research, added that Gumboro spread in epidemic proportions because breeders are unaware of the laboratories and research available in Egypt, as well as the fact that they do not use sterilized clothes to prevent infection.

## INDIA

### Calcutta Typhoid Patients Immune to Usual Medication

54500066 Calcutta *THE STATESMAN in English*  
10 Feb 90 p 3

[Article by Diptosh Majumdar]

[Text] Confounding medical practitioners, typhoid patients in and around Calcutta are not responding to treatment by the usual drug—Chloramphenicol, marketed under the various trade names of Chloromycetin, Enteromycetin and Paraxin. This strange phenomenon has been confirmed by tests conducted both at SSKM Hospital and the National Institute of Cholera and Enteric Diseases. Tests conducted at NICED show that the typhoid bacteria, "Salmonella typhi" was not responding to strong Chloramphenicol doses and also to less potent antibiotics like Ampicillin and Co-trimoxazole, the latter available under trade names like Septtran.

A number of doctors said the phenomenon had been noticed since last September. Medical records show that this is the third time in the history of medicine that the typhoid bacteria has developed immunity against antibiotics. This resistance was first witnessed during a typhoid epidemic in Mexico in the early 1970s. Almost at the same time, a similar outbreak in Karnataka and Kerala revealed that the usual medicines were not effective. Many doctors believe that typhoid mortality was exceptionally high under the circumstances but there are no records to justify their views.

### Symposium on Tobacco-Related Diseases

54500065 Bombay *THE TIMES OF INDIA in English*  
21 Jan 90 p 6

[Text] Tobacco causes nearly 630,000 premature deaths annually in India. This has been revealed in a research conducted by the basic dental research unit of the Tata Institute of Fundamental Research (TIFR). The project began in 1966 and concluded only last year during which 160,000 persons were examined in seven areas of the country.

Addressing a news conference at the end of the five-day international symposium on control of tobacco-related cancers and other diseases at the TIFR, the delegates said that tobacco has been identified as the largest single preventable cause of death and disease in the world today. Nearly 2.5 million persons died globally every year as a result of tobacco consumption, they said.

The delegates will formulate an action plan to convince the public at large about the ill-effects of taking tobacco. The emphasis on the plan will be on teaching, education and persuasion.

The statutory warning on cigarette packets has had negligible impact so far because it barely attracts attention. On the other hand, the delegates feel that if it is prominently displayed it will be more effective and can help in bringing down the consumption of tobacco.

How well the anti-cigarette campaigns in the US have succeeded can be gauged from the fact that smoking has been totally banned in all domestic flights lasting less than six hours.

They said that research studies in the US have shown that tobacco advertisements in magazines influence smoking and health issues to a significant extent. They also prove that an increase in the level of taxation on tobacco products helps in reducing consumption while maintaining the level of tax revenue. The increase in taxation, should be such that tobacco products do not become less expensive in real terms after taking inflation into account they said.

While calling for an increase in taxation on tobacco products, they ruled out the possibility of a total ban as it is an important source of revenue and employment particularly in Maharashtra.

They regretted that legislation passed sometime ago banning smoking in many public places has so far not been fully enforced. In Maharashtra, for example the ban covers state government offices, hospitals and local strains (In Greater Bombay). The delegates believe that it should be extended to theatres, restaurants and some other public offices too.

In Andhra Pradesh, a large number of persons indulge in what is known as "reverse smoking" and the majority of them are women. Research at TIFR has shown that health education is effective in curbing consumption. In this project health education was imparted through films, posters, radio and folk theatre in Ernakulam district of Kerala, Srikakulam district of Andhra Pradesh and Bhavnagar district of Gujarat.

**India Estimated To Have 4 Million Leprosy Cases**  
54500064 *Calcutta THE STATESMAN in English*  
18 Jan 90 p 4

[Text] More than 25,000 leprosy cases have been detected in Jamshedpur and its nearby areas by the Bharat Sevashram Sangha. Twenty thousand patients are

undergoing treatment in 42 clinics—24 in the urban and 18 in the rural areas. Three thousand patients have been cured with the help of multi-drug therapy. The people are made aware about the disease through publicity materials.

Since 1980 the Bharat Sevashram Sangha's Jamshedpur unit has been playing an important role in the treatment and rehabilitation of leprosy patients. It has been looking after the patients living in self-settled colonies around the steel city.

In the latter part of 1982, the Centre and the Bihar Government entrusted the Sangha with the task of taking measures to eradicate leprosy by the turn of the century. The areas that came under the programme were Jamshedpur town, Mango and Jugsalai municipalities and Jugsalai block, Rajnagar and Potka blocks of Singhbhum district. There are 612 villages with a population of 900,000.

Two 30-bed hospitals in Davanki (Potka block) and Sidhgora (Jamshedpur town), inaugurated in 1987, offer "reconstructive" surgery.

Measures have been taken for the rehabilitation and welfare of the patients. There is a shoe-making centre and several people have been gifted sewing machines, weaving sets and rickshaws. There is also a bandage-rolling machine. The crippled, blind and handicapped patients are given free food and clothes. Children, expectant mothers and old invalids are given milk. There are two primary schools for children.

According to Swami Jnanatmananda, assistant secretary of the Sangha, Jamshedpur unit, in India, there are an estimated four million leprosy patients. One out of five of them are infectious. Most of the cases have been reported from Tamil Nadu, Karnataka, Andhra Pradesh, Orissa, West Bengal, Bihar, Nagaland, Meghalaya, Manipur, Sikkim, Tripura, Maharashtra and the Union Territories of Pondicherry, Lakshadweep and the Andaman and Nicobar islands.

## IRAN

### Many Eradicated Diseases Make Comeback

900101321 *London KEYHAN in Persian* 21 Dec 89 p 4

[Text] The decline in the level of hygienics in Iran, the shortage in medical personnel, and the existence of irregularities in the management of health matters have prompted a reappearance of diseases that had been eradicated in the various parts of the country before the Islamic Revolution, threatening the lives of both the rural and the urban population. Typhoid is mentioned as one of the diseases which have currently assumed an endemic aspect and victimizes a number of people each year. Besides typhoid, publications in the Islamic Republic desultorily report the spread of such diseases as AIDS, Malta fever, cholera morbus, varieties of skin

diseases such as Aleppo boil, eczema, trachoma, and also the recurrence of malaria in certain parts of the country.

Dr. Bijan Sadrizadeh, advisor to the Ministry of Health, Treatment, and Medical Education and general manager of the Department to Combat Diseases, announced some time ago that the incidence of typhoid fever fluctuated in various years.

Declaring typhoid fever as a major endemic disease of the country, the said official added: Typhoid fever is currently more rampant in regions such as Sistan va Baluchestan, Kermanshahan, Hormozegan, Bushehr and Kordestan, where there is a problem with potable water, sewerage, and garbage disposal.

The above mentioned official said to the Tehran KEYHAN reporter: Malaria is under control in two-thirds of the country. About four-fifths of the number of malaria patients pertains to the cities of Bandar 'Abbas, Minab, Kahnuj, Chah Bahar and Iranshahr.

Dr. Sadrizadeh added: Due to the nonallocation of the necessary funds as well as the nonobservance of hygienic rules, the rate of malt fever affliction has been rising during recent years.

## ISRAEL

### Health Ministry Confirms Whooping Cough Outbreak

54004506A Tel Aviv YEDI'OT AHARONOT in Hebrew 25 Oct 89 p 9

[Text] A whooping cough epidemic has been raging in Israel in the past few months, but the Health Ministry failed to inform the public about it.

Since the beginning of the year, 186 cases have been reported among people of all ages. The report is not, however, complete and it is feared that the cases are more numerous than that. In 1988 only 11 cases of whooping cough were reported in Israel.

The reaction of the Health Ministry Epidemiology Department was, "Correct, there is an outbreak of whooping cough in the country."

Some of the patients who contracted whooping cough now had been previously inoculated against it. The others, mostly children, were not vaccinated at all because of their mothers' fear of the vaccine's side effects.

The Health Ministry urged parents of babies to give them the "triple shot," which provides full inoculation against tetanus and whooping cough, in three boosters, and not to believe rumors that the shot was allegedly dangerous and harmful.

The Health Ministry is aware that some pediatricians recommend against whooping cough vaccination,

because in certain cases the vaccine may cause in babies convulsions and brain damage, as was known to happen 10 years ago.

"Whooping cough is more frequent among populations that were not inoculated. However, in recent years there were outbreaks even among populations with a high percentage of vaccinations," stated three epidemiologists, Dr Schwartz, Dr Schwartzman, and Dr Stopler in a study done on the 78 cases of whooping cough recorded in 1987 in one kibbutz.

They also warned: "In view of the changed epidemiological nature of the disease, it is very probable that the percentage of adults infected will increase in the future."

### Meningococemia Outbreak in Galilee

54004505 Jerusalem THE JERUSALEM POST in English 12 Feb 90 p 2

[Article by David Rudge and Judy Siegel]

[Text] Kafr Nahf—Residents of this central Galilee Arab village were in near panic yesterday following the weekend outbreak of meningococemia—a virulent bacterial disease that killed a five-year-old boy and left three other children fighting for their lives in the Nahariya hospital.

Anxious parents formed queues outside the local Kupat Holim clinic asking doctors to examine their children and administer preventative medicine if necessary.

The local council ordered the closure of the village's four schools for the next three days as a "safety precaution."

"We want to minimize the risk of contagion and since the schools, with 2,300 pupils, constitute a mass meeting place, we decided it would be better to close them and keep the children at home," council head Ahmed Abass told THE JERUSALEM POST.

Abbas said the move had been approved by the Education Ministry. The pupils would make up the lost time by attending school for three days during the Pessah holiday, he said.

He noted that the measure was also intended to calm residents who feared the disease might spread.

Two youngsters who contracted meningococemia in Nahariya six months ago also died of the disease, further increasing the concern of the residents here.

The Nahariya hospital sent a team of doctors to the village, which has a population of more than 7,000, to help with examinations and explanations.

The local clinic, with a senior doctor in charge, stayed open for 12 hours instead of the normal four, to cope with the flood of anxious residents.

Dozens of children were examined and several, suffering from fever and sore throats, were sent to the Nahariya hospital for further tests.

The hospital's deputy director, Dr. Moshe Daniel, said many were suffering from flu and did not exhibit symptoms of meningococcemia. They were sent home. Three children, however, were kept in the hospital yesterday for observation, although they did not appear to have contracted the disease.

"It would appear that we have reached the peak of the outbreak and, hopefully, there won't be any more cases," said Daniel.

He explained that 8 percent of the country's adults have the meningococcus bacteria naturally in their throats, where the bacteria do no harm. In rare cases, and in a process not understood by doctors, the bacteria can attack those who may lack natural immunity, especially children. There are an average of eight deaths per year from such cases.

Unlike the much more common meningitis (inflammation of the tissue surrounding the brain and spinal cord), meningococcemia involves toxins that enter the bloodstream and can poison various vital organs.

The bacteria is spread by discharges from the mouth, and not by water or food supplies. Youngsters living in crowded or primitive living conditions are generally not more susceptible to the rare infection, he said.

"There is no way to prevent it, and there is no vaccine," Dr. Daniel said. "Those who have been in contact with a victim are given large doses of antibiotics, and these usually kill the bacteria."

He said the three children from Nahf who had contracted the disease and had been hospitalized in isolation wards since the weekend were showing "significant signs of recovery."

The three are 'Arafat Fa'id, 12, Muhammad Matr 'Ali, 14, and Huda 'Abd-al-Ghani, 14.

Daniel said al-Ghani, who had sunk into a coma and was kept alive on a respirator, regained consciousness yesterday and was able to breathe normally, although her condition remained serious.

### High Incidence of Brucellosis

90WE0048A Tel Aviv HA'ARETZ Supplement  
in Hebrew 20 Oct 89 p 4

[Article by Yifat Nevo]

[Text] Drinking milk contaminated with the Brucella microorganism and eating cheese or other dairy products contaminated with this germ caused 495 cases of Brucellosis in the Israeli population last year. This was reported in the annual statement (1988) of veterinary services in

Bayt-Dagan. The report also discusses the presence of toxic substances and heavy metals in poultry products.

Brucellosis is one of those rare diseases that can be passed from animals to human beings. Specifically, this disease passes from food or drink made with unpasteurized or unboiled dairy products. In Israel, the disease is carried mainly by drinking goat's milk or eating goat's cheese that has not been pasteurized.

Prof Dan Mikha'eli, director of the Tel Aviv Medical Center and an expert on infectious diseases, says that the disease is on the rise all through the Mediterranean Basin and that this year tens of thousands of new cases have been reported.

Since it is not transmitted from person to person but comes almost exclusively from eating contaminated dairy products, the rise in cases was a red light for the veterinary services which deal with preventive inspections. This is especially so since we are talking about a disease which tends to be chronic and is characterized by a high fever, joint inflammation, spinal meningitis, anemia, and glandular involvement. Concern increased this year after a case of Brucellosis was discovered in a dairy cow.

According to Professor Mikha'eli, the best way to prevent this disease is pasteurization or heating above 70 degrees.

According to the report of the veterinary services, traces of toxic substances were found in 4 of the 94 samples of poultry products. In the course of 1988, 178 inspections were carried out to look for irregular metals in poultry products. In 2 out of 27 samples of beef liver and in 1 out of 10 samples of turkey liver, there was an abnormal level of mercury. The excess mercury was on the order of 25 percent above the desired level. An abnormal level of cadmium was found in 3 of 27 samples of beef liver, in 4 of the samples of turkey liver, and in 5 samples of goose liver. The level of excess cadmium ranged from 25 to 100 percent. According to the report, an estimate of the cattle judged unfit for human consumption among those slaughtered was 2.12 percent.

### Incidence of Malta Fever Increases

54004507A Tel Aviv DAVAR in Hebrew 26 Oct 89 p 3

[Text] A record number, 495 cases of Malta Fever, were reported among Jews in Israel in 1988, contracted from sheep infected with Maltese brucellosis. This data was drawn from a report by the Veterinary and Herd Animal Services in Bet Dagan for the 1988 year.

The report further indicates that in the same year, the number of Malta Fever cases in humans among minorities in Judaea and Samaria rose to 718, versus 225 cases in the previous year. One boy even died from the disease.

The disease at the beginning has flu-like symptoms. As it progresses, it causes deep depression, fever, and pains in the joints which last for months. For the most part, the

disease disappears by itself within a year at the most and the chances of it recurring are slim. However, the danger exists that infections will develop in all the limbs.

According to the report, a plan for eliminating the disease in Judaea and Samaria had been approved at a certain stage but the treasury had quickly canceled it. The plan has now been revived and the veterinary services are currently expanding the scope of immunizations in Judaea and Samaria and in Israel. The vaccine, claims the report, cannot eliminate the disease, but it can be anticipated that it will reduce the scope of the problem.

It was found that most cases of infection occurred as a result of eating sheep milk products infected with *Maltese brucellosis*. Some cases were the result of direct contact with the animals or animal parts.

#### **Rare Cattle Virus Found in South**

54004504 Tel Aviv YEDI'OT AHARONOT in Hebrew  
2 Oct 89 p 8

[Text] From Ashkelon to the south, the transportation and sale of animals has been restricted until further notice. The veterinary service took these steps after discovering a rare cattle virus on Moshav Paduim. The disease was apparently brought in from Egypt.

Tens of thousands of head of cattle in the south were vaccinated by the veterinary service during the holidays, this following the discovery of a rare cattle virus on Moshav Paduim approximately 10 days ago, which led to the slaughter of the entire herd of cattle on the moshav. On the eve of the holiday, the veterinary service even declared an area within a 10-km radius around Moshav Paduim closed to the transportation of animals until further notice.

An additional area, within a 10-km radius of the border with the green line, east to the Gaza Strip, was also closed. In effect, the entire southern region, from Ashkelon to the south, has been restricted.

According to these serious restrictions, imposed during the holidays on the farmers of moshavim near the Gaza Strip, the sale and transportation of cattle from the Strip is prohibited for a 3-week period.

Sources at the Ministry of Agriculture reported that the operation to eliminate the rare virus was continuing and that in addition to vaccinating most of the cattle in the south, 637 head of cattle, which had apparently been stricken with the disease, had been destroyed.

This rare virus has recently been reported in cattle from Egypt and was apparently brought in from Africa. The head veterinarian of the ministry of agriculture, Dr Arnon Shimshoni, emphasized that the disease is not harmful to humans.

## **PAKISTAN**

### **Cabinet Discusses National Health Policy**

54004705 Karachi DAWN in English 20 Feb 90 p 10

[Text] A meeting of the Federal Cabinet was held on Monday under the chairpersonship of the Prime Minister, Benazir Bhutto. It considered in detail the National Health Policy submitted by the Ministry of Health.

A sub-committee was constituted to re-examine some of the features of the Health Policy in the light of the guidelines given by the Cabinet. All the provincial governments would be represented on this sub-committee.

Among other decisions, the Cabinet approved conclusion of an agreement between Pakistan and Indonesia for the avoidance of double taxation and the prevention of fiscal evasion with respect to taxes on income. The conclusion of this agreement is important in view of the prospects of growing economic collaboration between the two countries.

The Cabinet approved ratification of the agreement on social security between Pakistan and Libya. This agreement will provide the Pakistani workers a social security cover during their stay in Libya in the contingencies of sickness, work injury, maternity, invalidity and death. It will benefit thousands of Pakistani workers who have since returned to Pakistan and whose contribution paid towards pension funds was lying with the Libyan Social Security institutions.

### **PIA Bans Smoking on Domestic Flights**

54004705 Karachi DAWN in English 16 Feb 90 p 7

[Text] The PIA's move to ban smoking on all its domestic flights is highly commendable. It is significant that the decision has been taken in deference to the wishes of an overwhelming majority of the airlines' passengers who voted for the ban in a survey conducted by it. This popular approval for smoke-free travel reflects a growing awareness of the serious hazards that tobacco-smoking poses to the health of the people. Indeed, research and studies have established beyond doubt that smoking is a major cause of throat and lung cancer. It does harm not only to the smokers themselves but also to those nearby who become "passive smokers" and are involuntarily exposed to the risk. So the demand is growing for a total ban on smoking in public places. Equally pertinent is the demand for a ban on cigarette advertisements. In the face of glamorous promotional publicity on television and radio, it is but a cruel joke to print warnings against the adverse effects of tobacco on cigarette packets. It is high time a consistent position was adopted on the issue and effective steps taken to contain the health hazards of smoking. To start with, the electronic media should be pressed into service to publicise the fact that tobacco is a deadly health hazard, rather

than permitting their use for glamorising smoking as a habit and for promoting the sale of cigarettes and other tobacco-related products.

The PIA has done well to set a good example. The railways, too, should consider banning smoking in train compartments and in station waiting rooms. As for the PIA, the next logical step should be to impose total prohibition on smoking on its international flights.

### Rural Health Care Called 'Poor'

54004705 Karachi DAWN in English 19 Feb 90 p 7

[Text] Complaints about the working of Basic Health Units (BHUs) suggest that primary health care, especially in the rural areas, exists but nominally. Few units have the necessary stocks of drugs because they are allegedly pilfered by the unscrupulous among the health department staff. In some parts of Punjab many of these Units do not even have a pharmacy to store medicines, and doctors cite the lack of drugs and equipment as the main reason for their absence from duty. This gives an idea of the way BHUs are run. The purpose of setting up these Units is to provide the rural population with the basic minimum of health care. The programme has been expanded in recent years to cover about 85 percent of the Union Councils in the country. Given their present state, however, it can be safely assumed that vast sections of the rural population, especially those who do not have access to district and tehsil hospitals, remain deprived of even the elementary medical facilities. The situation is symptomatic of the apathetic attitude of the authorities towards the health of the people. Snags have already hit the UNICEF-funded extended programme for immunisation against six common childhood diseases. Problems in transportation of vaccines apart, there have been cases in Bahawalpur, Multan and Sheikhpura of immunised children contracting the diseases they had been protected against. The reason mainly was poor storage which had affected the potency of the administered vaccines. In many areas, diarrhoea and pneumonia are still common among pre-school age children and are responsible for most fatalities in that group. Failure to maintain supplies of essential drugs and equipment is matched by the shortage of nurses and para-medical staff.

Any strategy for a better health set-up in the rural areas must aim at strengthening field work, developing the necessary infrastructure and improving the performance of the medical personnel. Health manpower deployed in far-flung areas lacks appropriate training, there being no institutes which could give their training a rural orientation. Compulsory rural health service for doctors for a specified period has often been talked about. But in the absence of adequate remuneration and housing, transport and other essential facilities, any such scheme would be difficult to implement. Difficulties relating to the supply and maintenance of essential medicines and equipment are less a matter of financial constraints and

more a question of efficiency of management. Imaginative policies are also needed to involve the private sector in the extension of rural health care. The new health policy, it is hoped, will address these problems in order to make the objective of health by the turn of the century a realisable goal.

## UNITED ARAB EMIRATES

### Decline in Infant Mortality Rate

#### Health Ministry Reports on Study

54004507 Dubayy KHALEEJ TIMES in English  
28 Feb 90 p 1

[Article by George Abraham]

[Text] The UAE has joined the ranks of the highly developed nations with a reported infant mortality rate of just 11 in every 1,000 births.

Dr 'Abd-al-Wahhab al-Muhyaydib, Assistant Under-Secretary (Preventive Medicine), told the KHALEEJ TIMES yesterday that this achievement was revealed in a study concluded by the Health Ministry last week. Infant mortality covers those who die before attaining the age of one year.

The study recorded 52,000 deliveries in the UAE in 1989, with 97 percent of them taking place in hospitals, Dr al-Muhyaydib said. It also compared the infant mortality rates between 1984 and 1989. The reported infant mortality rate dropped from 15 per 1,000 in 1984, to 11 per 1,000 in 1989.

However, Dr al-Muhyaydib noted that for official purposes the ministry would assume a figure of 15 per 1,000 for 1989, to account for deaths which were not reported. He pointed out that the ministry was being over-cautious in this regard, since the death notification system covered almost every corner of the country.

UNICEF classifies nations into four groups, the last consisting of countries with an infant mortality rate of less than 20 per 1,000. The mortality rate in the other three groups exceeds 20 per 1,000. Dr al-Muhyaydib noted that only the highly developed nations belonged to group IV.

#### Additional Statistics From Study

54004507 Dubayy GULF NEWS in English  
1 Mar 90 p 3

[Text] The decline of the death rate of infants (one year and under) has placed the UAE in the fourth group which represents the best worldwide positioning regarding decrease in infant deaths.

According to a statement by the Assistant Under-Secretary for Preventive Medicine Dr. 'Abd-al-Wahhab

al-Muhaydib the fourth group includes a few European countries, the United States, Japan as well as other advanced nations.

Dr al-Muhaydib added that the inclusion of the UAE in the fourth group signifying the fall of the infant death rate below 20 percent for every 1,000 born babies, is the result of improvements in services rendered by the country such as clean drinking water, sewage networks, drainage systems, various social programmes, comfortable housing, appropriate income, education and focused advertising. In addition, there are municipality services and health services.

Dr. al-Muhaydib said that from 1984 to 1989 there was an increase of births in the country in conjunction with a decrease in infant death rates for those under one year thus reaching a low 15 percent.

Also, an additional percentage is quoted to account for infant deaths that are not reported, due to occurrence outside hospitals and medical centres, that being 10 percent.

Dr. al-Muhaydib said that the annual registration of birth rates in hospitals reached 97 percent, and no less than 80 percent of infant deaths are reported by the various parties.

There had been studies in the past 10 years regarding infant deaths, the latest of which was done in cooperation with an organisation in 1988.

The study showed that the infant death rate in the country is 25 percent for every 1,000.

Dr. al-Muhaydib said that the above information was not released earlier for various reasons, one of which is the credibility of the random sampling as well as not applying the correct medical information.

Thus the authorities rely more so on the national medical bodies that report accurate data.

In 1988 there were nine reported cases of polio while last year there were none.

Dr. al-Muhaydib reiterated that infant death rates are clear indicators of the advancement of the medical field in a country.

He said that the level the UAE has reached is the result of a cooperative effort from the various institutions under the leadership of President His Highness Shaykh Zayid Bin-Sultan al-Nuhayyan and His Highness Shaykh Rashid Bin-Sa'id al-Maktum, Vice President, Prime Minister and Ruler of Dubayy.



## CANADA

### Whooping Cough Outbreak; Low Immunization Levels Blamed

#### Alberta Reserve Schools Close

54200027 Toronto *THE GLOBE AND MAIL*  
in English 5 Feb 90 p A3

[Excerpts] Children are conspicuously absent from the streets of this Indian reserve in central Alberta. "Closed" signs are posted at the band schools, and the playgrounds and community center are deserted.

More than 600 children under the age of seven have been inoculated in a recent blitz to stem an outbreak of pertussis, or whooping cough, on the Hobbema reserve, 75 kilometers south of Edmonton.

About 250 cases have been reported this year in the community of 7,000, accounting for more than half the 492 cases reported for the entire province last year.

Dr Richard Musto, in charge of federal health services on Alberta reserves, says for every person infected it is estimated another eight have been exposed to the bacterium. That means more than 2,000 people may be affected and Dr Musto fears the disease won't peak for another month.

He blames the outbreak on low immunization levels—25 percent compared with the 85 percent provincial average.

#### 500 Sticken on Alberta Reserve

54200028 Toronto *THE GLOBE AND MAIL* in  
English 14 Feb 90 p A3

[Text] Native leaders met yesterday to discuss how to avert another outbreak of whooping cough on the Hobbema reserves as health workers there continued to treat new patients. More than 500 people, mainly children, have been stricken by the severe and potentially dangerous cough since the beginning of January. Dr. John Waters, of the provincial communicable disease control office, said the disease is not confined to natives but immunization rates are generally lower on Indian reserves.

### Measles Strike Students at Two Schools in Newmarket

54200032 Toronto *THE TORONTO STAR* in English  
7 Mar 90 p A6

[Text] Students are being vaccinated after a sudden outbreak of red measles at Notre Dame Separate School and Sacred Heart Catholic High School in Newmarket. At least 27 students have fallen ill with what doctors warn is a more serious illness than most people think. Dr. Karim Kurji, York Region's associate medical health officer, said people vaccinated before 1980 will get shots.

### Conference Told of High Cost of Treating Pelvic Disease

54200015 Vancouver *THE WEEKEND SUN* in English  
28 Oct 89 p A9

[Article by Joanne Blain]

[Text] Pelvic inflammatory disease is costing Canada's health-care system \$2 million a week "as a conservative estimate," the chairman of a federal government advisory committee on sexually transmitted diseases says.

And Dr. Barbara Romanowski says the cost of treating the disease and its complications is likely to continue to rise because there are no signs of a downturn in the skyrocketing incidence of the sexually transmitted diseases that cause PID.

Based on that trend, she says one in four women will have contracted PID, an infection that can cause scarring of the internal organs, by the turn of the century.

"If things don't change and if we don't start doing something to control sexually transmitted diseases, then it's something that's very likely to occur," says Romanowski, who is also director of sexually transmitted disease control for the Alberta government.

A fifth of all women infected with PID will develop a serious consequence of the disease, such as infertility, chronic pelvic pain or a potentially life-threatening pregnancy in the Fallopian tubes, says Romanowski.

She is in Vancouver to address a conference on PID being held today at Simon Fraser University's downtown campus. It is sponsored by the Canadian PID society.

The \$2-million a week figure comes from a Health and Welfare Canada study that looked at the direct costs of medical care, surgery and hospital care of PID sufferers, as well as indirect costs such as lost productivity as a result of illness.

Chlamydia, one of two sexually transmitted diseases that most often lead to PID, "has increased by leaps and bounds since the early 1980s," Romanowski says.

And even though the incidence of gonorrhea, another frequent cause of PID, has dropped off sharply in recent years, new strains that are resistant to infection are now turning up, she says.

Eighty percent of women who contract gonorrhea or chlamydia have no symptoms of the disease. That's why the key to the problem lies in preventing infection, says Romanowski.

Intrauterine birth-control devices (IUDs) and abortions can also lead to PID, she says. A self-induced abortion, which a U.S. video recently obtained by some Canadian groups shows women how to perform, is "a horrific environment to produce PID," she says.

Because of their sexual behavior, people between the ages of 15 and 24 are most at risk of developing PID, Romanowski says.

The same precautions being promoted for AIDS prevention—using condoms and limiting the number of sexual partners—are also effective ways to prevent chlamydia and gonorrhea.

But even though the “safe sex” message is being heard, many people aren’t putting it into practice and changing their sexual behavior, Romanowski says.

### **Influenza Cases Reported in British Columbia, Halifax**

#### **British Columbia Epidemic Peak**

54200023 Vancouver *THE SUN* in English  
4 Jan 90 p A10

[Article by Alicia Priest]

[Text] While this season’s flu epidemic continues to crowd provincial emergency departments and doctors’ offices, it is nothing unusual for this time of year, provincial epidemiologist Dr John Farley said Wednesday.

Reports from doctors monitoring the situation across the province show the influenza virus was responsible for more than 10 percent of all visits to doctors in the week after Christmas, Farley said.

But Farley said those figures are comparable to last year’s flu epidemic. And as of this week, reports appear to have taken a downturn—a sign that the spread of influenza A and B may have peaked, he added.

Vancouver communicable disease consultant Dr Ted McLean said the public is also suffering from a range of upper-respiratory infections that have flu-like symptoms.

“But from my contacts, I’m not hearing about any more cases than last year, probably a little less,” McLean said.

Meanwhile, Lower Mainland emergency departments reported busier than normal patient volumes.

On New Year’s Day, Surrey Memorial Hospital treated a record of more than 300 patients in the emergency department in a 24-hour period, hospital spokesman Elizabeth Warren-Knox said Wednesday. Normally, the center sees about 150 to 200 patients in that time period.

University Hospital spokesman Mary Yager said patient visits to emergency departments at the hospital’s Shaughnessy and University of B. C. sites have “dramatically increased” due to the flue epidemic.

Richmond General Hospital executive director Grant Moreton said the flu has hit both staff and patients, but so far patient volumes have not been a problem.

Both St. Paul’s Hospital and Vancouver General Hospital reported busy but manageable patient levels in their emergency departments.

#### **Halifax Hospital Staff**

54200023 Toronto *THE GLOBE AND MAIL*  
in English 4 Jan 90 p A12

[Text] An outbreak of flu has sidelined about 10 percent of the nurses at the largest hospital in the Maritimes and forced officials to postpone some elective surgery. The number of patients at the 800-bed Victoria General Hospital in Halifax dropped to about 300 over the holidays. But officials have decided to leave 100 beds closed until more nursing staff are back at work.

### **Bison in Alberta Infected with Tuberculosis, Brucellosis**

54200029 Windsor *THE WINDSOR STAR* in English  
12 Feb 90 p C10

[Text] A plan to destroy 4,200 bison in Wood Buffalo National Park has pitted cattlemen against natives, environmentalists against environmentalists, and some of Canada’s most distinguished wildlife experts against one another.

A federal panel conducting hearings into the fate of the bison herd—up to half of which is infected by two diseases—received conflicting theories on how best to manage bison and cattle around the national park. Some advocated the bison slaughter while others suggested letting nature take its course.

“Some people have stated that this is the most important wildlife issue the country has ever faced,” said Stacy Tessaro, a wildlife biologist with Agriculture Canada.

Supporting Alberta cattle ranchers, Agriculture Canada wants to destroy the entire bison herd roaming the national park, which covers a wide area of northeastern Alberta and extends into the Northwest Territories.

The proposed slaughter is intended to stop the spread of tuberculosis and brucellosis to cattle in the area. An estimated 30 to 50 percent of the bison in the park are infected with the two diseases.

Brucellosis was blamed in the deaths of 14,000 cattle in the 1980s, costing the federal government \$8.6 million in compensation and hundreds of ranchers nearly a lifetime of work. Another \$2 million was spent compensating cattlemen for tuberculosis outbreaks during the same period.

“We’ve finally got to the point now where (cattle are) considered to be brucellosis-free,” said Don Matthews, president of the Canadian Cattlemen’s Association. “That’s why Canadian beef producers see the current situation in Wood Buffalo as an unacceptable one.”

The agricultural zone south and west of the park has been targeted by the Alberta government for cattle

expansion. Agriculture Canada officials and ranchers believe diseased bison from the park will contaminate cattle.

They also think 2,000 disease-free bison in the Mackenzie Bison Sanctuary, northwest of Wood Buffalo, could be contaminated.

"All it would take is one diseased animal mixing with the healthy herds to set off another epidemic," warned Bill Bulmer of Agriculture Canada.

The diseases were introduced by bison transported to the park in 1925 from a small herd at Wainwright, Alta.

The death toll has been dramatic. Since the 1960s the bison population in the park has dropped from a high of about 12,000 to 4,200. The survival rate for calves is less than half of what it should be. Ease is not the only factor contributing to herd reduction. A series of floods over the past 30 years may have drowned up to 10,000 bison, said park superintendent Ken East. This may also have affected the herd's reproductive cycle, he said.

Critics of Agriculture Canada's plan to destroy the herd say the diseases should be left to follow their course while work continues on developing a vaccine.

Calgary wildlife scientist Val Geist said the bison might be at the bottom of what biologists call the "predator pit"—a phenomenon where a balance is reached between predators and prey that allows herds to rebound to a healthy population.

If the herd were left alone, predators such as wolves might eventually eliminate the diseases by preying on stricken bison, said Geist.

## **Fear of Pine Wood Nematodes May Hurt Exports**

### **Finland Demands Quality Controls**

54200024 Toronto THE GLOBE AND MAIL  
in English 18 Jan 90 p B3

[Text] Canada is attempting to persuade Finland to drop a demand for costly quality controls on Canadian softwood lumber exports that could prompt similar demands across Europe, a forestry official says.

"We don't want to set a precedent that we consider unnecessary" by meeting the Finns' demands, said Fred Johnson of Forestry Canada's science directorate.

"That precedent has the potential of doing us great damage with our European trading partners."

The diplomatic manoeuvring began after tiny worms resembling wriggling pieces of spaghetti—pine wood nematodes—were discovered in Finland in one shipment of low-grade lumber from Nova Scotia.

The Finns fear the nematode could threaten their forests. Canadian government and industry officials insist that's highly unlikely, noting it is the first such discovery in Canadian sawn timber.

Still, three Canadian government departments are trying to find a compromise with the Finns before their demands are echoed in Europe, a market worth \$250-million a year to Canadian softwood lumber exporters.

Mr. Johnson said Canada's ambassador to Finland was holding talks in Helsinki yesterday on behalf of External Affairs, Agriculture Canada and Forestry Canada.

Whether or not the nematode would be a threat to their forests, the Europeans are taking the issue quite seriously, said Dorothy Laidlaw, Agriculture Canada's chief of quarantine management.

"There's a European plant-protection organization which has studied the issue and has made recommendations that they take measures to make sure (the nematode) doesn't get in there—and that covers about 34 countries," she said.

Mr. Johnson said the Finns intend to introduce regulations requiring two things of Canadian softwood exporters. All lumber would have to be kiln-dried—the heat kills the worms—and accompanied by a certificate saying it's free of certain insects and diseases.

Such measures are both unnecessary and costly, he argued. Industry officials say kiln-drying alone could increase costs by 10 percent.

"The certificate would have to be issued by Agriculture Canada, so there's a logistics problem—shipments and bundles would have to be inspected," Mr. Johnson said.

"But more importantly, it's the kiln-drying requirement. That's assuming that all producers are able to do that. And in the case of the Maritime region not all producers are in a position to provide kiln-dried lumber."

The pine wood nematode has been discovered in Canada in dead or dying logs or in fire-damaged timber that sometimes makes its way to sawmills, where it can be turned into low-grade lumber.

The worm may be found in low-grade pine—which forms only a fraction of Canadian softwood exports—because it's permissible for such lumber to have defects such as grub holes, which can harbor insects that carry and transmit the nematode.

Such holes are not allowed in higher-grade lumber.

Mr. Johnson said Ottawa hopes to persuade the Finns to accept a mill-certification program already in place for Canadian softwood exports to the United Kingdom, a market worth \$490-million annually.

Diane Blenkhorn of the Maritime Lumber Bureau played down the potential for harm to European forests by the nematode found in the Canadian shipment to Finland.

"If it had been a higher-grade construction lumber that we are used to producing—by and large 99 percent of our (export) shipments—I believe it would never have been found," she said.

### Exports To Be Treated

54200030 *Ottawa THE OTTAWA CITIZEN in English*  
9 Feb 90 1p C3

[Text] Finland has decided against destroying \$1.25-million worth of possibly infested lumber from the Maritime provinces, a Forestry Canada official said Thursday.

But, after Jan. 17, Canada will require its sawmills to kiln-dry any lumber it exports to the Scandinavian country, the official confirmed Thursday. Some Canadian lumbermen have said they cannot afford kiln-drying.

Finland quarantined the shipment of low-grade softwood, destined to be made into forklift pallets, because of a roundworm infestation.

"The Finns have decided they will save the wood by kiln-drying it," Fred Johnson, director of forestry resources, said in a telephone interview from Montreal.

The heat of kiln-drying kills any pests that may live in green lumber.

"As of January 17, 1990, all shipments of Canadian lumber to Finland must be kiln-dried and accompanied by a phytosanitary certificate," he said.

The certificate means Agriculture Canada has ensured the lumber received specific treatments.

"The Finns have indicated to Canada that they want an absolute guarantee that pinewood nematodes will not be brought into their country," he said.

They fear the microscopic worms will infect their healthy forests.

Plant health officials in Turku, Finland impounded a shipment of Nova Scotia lumber Jan. 8 after it was found to contain pinewood nematodes.

Less than a month later a second shipment, most of which was from New Brunswick, was quarantined because it was suspected of carrying the worms.

## DENMARK

### Outbreak of Meningitis in West Sjaeland

#### Two Deaths Reported

90WE0116A *Copenhagen BERLINGSKE TIDENDE*  
in Danish 24 Jan 90 p 2

[Article: "Two-Year-Old Dead From Meningitis"]

[Text] A two-year-old boy from West Sjaelland has died of meningitis and 11 other people in West Sjaelland have contracted the disease since the beginning of the year. The people and physicians in the area are being called on to watch for any possible new cases.

Six of the patients became ill around the beginning of the new year and five of them lived in the southern part of the county, but apparently had no relationship with one another. Their ages also varied, from 2 to 33 years. Since 10 January an additional six people have contracted meningitis. Two of the patients were siblings. The two siblings and two additional patients live in the Hong-Gorslev area.

Health officer Soren Gustavsen has ordered preventive measures for the patients' families and others close to them. Schools and other institutions have been informed of the outbreak of the disease. Most of the cases of the illness belong to group B, for which there is no vaccine.

About this same time last year there was an similar outbreak of meningitis in Frederiksborg County, but in that case it involved mostly people in the same circle of acquaintances. During all of 1987 and 1988 West Sjaelland had 26 and 16 cases of meningitis, respectively.

#### Case in North Jutland

90WE0123F *Copenhagen BERLINGSKE TIDENDE*  
in Danish 28 Jan 90 p 9

[Article: "Meningitis Again"]

[Text] For the third time in two years the Hals School in North Jutland has been hit by meningitis. This time a 12-year-old girl has been admitted to Aalborg Hospital South. Dr. Henrik Hamburger of Aalborg described her condition as good. Her closest relatives are now undergoing preventive treatment.

## FRANCE

### Meningitis Outbreak Claims Two Victims

90WE0104a *Paris LE FIGARO in French*  
27 Dec 89 p 10

[Article entitled: "Meningitis: Two Days of Anguish for 1,700 High School Students"; first paragraph is LE FIGARO's introduction]

[Text] A particularly virulent form of this contagious disease caused the deaths of two high school students in Loiret. The alarm, rapidly sounded, kept the danger within bounds.

The meningitis alert seems to be over in Montargis, where there was great concern for 48 hours after the sudden deaths of two adolescents on Christmas night. Indeed, by Monday the Loiret prefecture had called on parents of the 1,700 students of the technical high school that the two young people attended to "take their children to hospital emergency rooms and to their family physicians for throat samples for monitoring purposes."

Hundreds of people rushed into the hospitals of Orleans, Montargis, and Pithiviers, which had been mobilized, and eight suspected cases were hospitalized. "Only one case, a 17-year-old boy, showed sure signs of meningococcus meningitis, but he is now fully recovered," said Professor Gueveler, head of the Orleans CHR (Regional Hospital Center) recovery room yesterday morning. "Seven high school students are still under care at the Montargis hospital center, but the meningococcus germ, which can cause septicemias that develop with lightning speed, has not been found in any one of them," said Dr. Hassan Mouane, the city emergency physician.

The gendarmery, the police force, and the Army were drafted to try to contact students of the Durzy and Jeanette-Verdier high schools, who might have come into contact with the disease: According to the prefecture's estimates, 1,500 of them have been contacted in this way. Four thousand doses of Rovamycine, an antibiotic effective against cerebro-spinal meningitis, were distributed to them, and to their parents and teachers, as a preventive measure.

"These emergency measures will not be continued, but a surveillance system will remain in place," announced the director of the Loiret health and social-action department yesterday afternoon. Indeed, some doctors regretted the size of the system set up, as well as the haste with which prefectural authorities decided to immediately summon nearly 2,000 children. "Initially, it would have been enough to contact the close associates of the deceased high school students," said, for example, Professor Gueveler.

Refusing to be drawn into a debate, the prefecture simply remarked that "the public appeal was justified by the emergency nature of the situation. The high school principal was on vacation and we were not able to get hold of the complete list of addresses until late Monday afternoon."

### More Salmonella Deaths Reported

90WE0045A Paris LE QUOTIDIEN DE PARIS  
in French 29 Oct 89 p 32

[Article: "The Elderly: Another Outbreak of Salmonella Poisoning"]

[Text] Two elderly patients residing at a specialized hospital center in Bailleul (Nord Department), showing traces of salmonella, died following an outbreak affecting

nearly 90 residents. The first death, that of a 70 year-old woman, took place last Friday. The second, that of an elderly man whose general health condition was already serious, occurred Thursday.

According to the center's director, analyses of the food served to the patients did not detect the presence of salmonella. Additional water analyses are being undertaken. "We cannot determine where the poisoning comes from. The two dead persons tested positive for salmonella," Gilbert Benitsa explained.

About 20 persons are still being treated at the specialized Bailleul hospital center—which has some 900 patients—but their lives are not in danger, the director pointed out. Food poisoning symptoms—diarrhea, vomiting, high fever—showed up last Thursday and Friday. Ninety persons were affected to varying degrees.

At the beginning of the month, seven elderly persons died at the Villiers-le-Bel hospital (Val-d'Oise Department) after "an outbreak of salmonella food poisoning and infection." In July and August, nine elderly persons at a retirement home at Bois d'Hure (Charente-Maritime Department) died, also victims of salmonellosis.

### New Method for Anti-Rabies Vaccination of Foxes

90WE0045C Paris LE MONDE in French 1 Nov p 19

[Article by Jean-Yves Nau: "A Rain of Vaccinations"]

[Text] Never have we succeeded in vaccinating so many foxes against rabies in France as we do now. Practiced in Europe for about 10 years, this type of vaccination—administered orally—was initiated three years ago in eastern France. It consists in getting the animals to swallow a vaccine (made up of live viruses enclosed in a capsule) that is incorporated into a food tablet made from animal fats and fish flour. This bait, which must not be touched with bare hands, is stored and distributed frozen. While thawing it gives off a odor that is nauseating for humans, but particularly appetizing for foxes. Although it is very effective, this form of vaccination has run into major problems of distribution, since a team of two persons using a car can cover only 10 square kilometers per day.

Recently, however, helicopters have drastically changed this situation. Flying at a maximum speed of 120 km/hr and with an altitude under 100 meters, they make it possible to distribute 15 doses per square kilometer. Nearly 4,000 square kilometers were covered last year in Haute-Saone and in Lorraine. The same operation was carried out a few days ago in western Seine-et-Marne and several campaigns will be launched by the end of the year in the departments of Haute-Savoie, Ain, Saone-et-Loire, Cote-d'Or, Doubs, and Essone.

"If such operations were extended during the next three to five years to all of France presently infected by the rabies virus, the monetary savings over the next 10 to 12

years ought to reach several tens of millions of francs annually," according to the specialists in one of the last issues of the Health Ministry's *BULLETIN EPIDEMIOLOGIQUE HEBDOMADAIRE* (issue 36-1989). In particular, such an operation ought to make it possible to substantially reduce the number of treatments of suspected human rabies infections each year in France. Although in France no case of human rabies after infection has occurred in years, a very large number of subjects at risk (after being bitten, scratched, or put in contact with a suspected animal) has been reported. Each year nearly 15,000 persons consult a specialized center, and 8,000 treatments (by vaccination) are administered. On that subject, the Pasteur Institute specialists in Paris are insistent about reminding us that the costly anti-rabies serum (of human origin) must imperatively be reserved for serious cases of infection (licking of the mucous membranes, bites to the head, fingers, or neck) and always in conjunction with the vaccine—recommendations that are far from always being followed.

### New Rabies Virus Found in Bats

90WE0045B Paris *LE MONDE* in French  
1 Nov 89 p 19

[Excerpt from article by Jean-Yves Nau: "Bats: Rabies on Wings. European Bats Are Infected With a Rabies Virus. The Epidemic Has Just Reached France."]

[Excerpt] The first two French cases of bats infected with a virus closely related to the rabies virus were registered a few weeks ago in eastern France. The first one was in the Briey commune (Meurthe-et-Moselle Department), where two persons were bitten by an animal flying by day and showing abnormally aggressive behavior. The second was near Nancy, where a bat, infected with the same virus, was found. In the Briey case, the two bitten persons were immediately treated at the rabies center in Metz, and the animal was sent to the National Center for Rabies Reporting at the Pasteur Institute in Paris. There, the isolation and identification of the virus made it possible to confirm the appearance of a new type of virus related to the rabies virus found in French bats. This discovery was just published in the last issue of the Health Department's *BULLETIN EPIDEMIOLOGIQUE HEBDOMADAIRE* [WEEKLY EPIDEMIOLOGICAL BULLETIN]<sup>1</sup>.

Actually, rabies specialists had anticipated this type of infection for some time. In Europe, viruses in bats were first isolated by 1954 in West Germany, then in Yugoslavia and Turkey. But it was not until 1980, with the appearance of monoclonal antibodies, which are a new tool for molecular biology, that it became certain that these viruses were closely related to those found in foxes (nearly 2,000 rabid foxes are reported each year in France) and in other animals (badgers, weasels, squirrels, roe deer, etc.), which may lead to the well-known human rabies cases.

This "bat phenomenon," which beforehand seemed very transitory, was progressively noted with greater and greater frequency. Between 1983 and 1988, 32 cases were identified in West Germany; between 1985 and 1986, 163 cases in Denmark; between 1986 and 1988, 126 cases in the Netherlands. In addition, three cases of fatal human infection from infected bats were reported during these same years (two in the USSR and one in Finland). "Eastern and northern Europe are not the only areas to be affected," explained Professor Pierre Sureau (National Center for Rabies Reporting, Pasteur Institute, Paris). "In Spain, two cases were diagnosed in 1987, in Valencia and in Grenada. By last year I expected we would find infected bats in France and Italy. In the United States, after the virus was first isolated in Florida in 1953, the phenomenon has become much more extensive, to the point that 48 of the 50 states are now affected." In Central and South America, a rabies epidemic among hematophagous (vampire) bats is rampant.

### Aggressive Pipistrelles

From what has been observed so far, rabies specialists are now led to believe that, contrary to what was thought at the outset, the infectious agent found in the European bats is a new virus. This is a virus that is different from the three viral types that were recently found in Africa, where they can infect rodents, dogs, bats, and humans. "In fact, there are two different theories explaining the origin and spread of these viruses among bats in Europe," explained Dr Jean Blancou (National Center for Rabies Studies, Nancy). "Some specialists, especially in Germany, think the infection came from South America, via ships stopping in Baltic ports. Other specialists in Great Britain think, on the contrary, that this virus has always existed in Europe." It is not presently possible, according to Professor Sureau and Dr Blancou, to tell whether the growing number of infected animals is due to a broader spread of the virus among bats or whether, on the contrary, we are dealing with only an apparent increase because of more perfected and more systematic observation.

Unlike what happens with certain African viruses, it is known today, thanks to experiments done at the Pasteur Institute in Paris, that persons vaccinated against rabies are protected against potential infection by this virus currently known as the "European bat virus".

### Footnotes

1. *BULLETIN EPIDEMIOLOGIQUE HEBDOMADAIRE*, 40-1989, "La rage des chauves-souris en France" [Rabies in Bats in France], by Messrs Sureau, Bourhy, and Lafon of the National Center for Rabies Reporting.

## GREECE

### Large Number of Hepatitis-C Carriers

90WE0131B Athens I KATHIMERINI in Greek  
27 Jan 90 p 4

[Excerpts] The discovery of the hepatitis-C virus which, until now, was known by the negative definition of non-A, non-B hepatitis, demands measures be taken in blood collection to check the spread of hepatitis.

The virus that was discovered has been spread in our country for years and there are an estimated 100,000-150,000 carriers. Today, with the use of the test for detecting the C-virus, it is possible to prevent carriers from giving blood and to control transfusions that comprise the most frequent means of transmitting it.

The subject, enormous for the epidemiology records of Greece, was taken up yesterday during the First Panhellenic Conference on AIDS and Sexually-Transmitted Diseases where there was also discussion of the hepatitis outbreak that struck patients at an Athens hospital 2 years ago. [passage omitted]

### Blood Transfusion "Guilty"

Mr. N. Tassopoulos announced the results of the studies on 156 patients who were hospitalized at the Western Attiki Hospital from February to November 1989 with acute non-A, non-B hepatitis. The research that took place in cooperation with epidemiologist Dr. Ang. Khatzakis and other researchers revealed that:

The cases of hepatitis-C from blood transfusions are very high in Greece.

The hepatitis that is transmitted through transfusion of contaminated blood, and especially the C-type, has a very poor prognosis. Of those infected with the C-virus, approximately 65 percent develop chronic liver disease.

Only 14 percent of the hepatitis cases of unknown causes is due to the C-virus, which means that there are probably other viruses (unknown) in the non-A, non-B category.

With regard to the outbreak observed two years ago at an Athens hospital, Mr. Tassopoulos said that it affected 12 patients who had not undergone surgery or had blood transfusions and the transmission of hepatitis was due most probably to a hidden parenteral exposure.

This outbreak, which has now been found (after the discovery of the virus) to be caused by the C-virus, is characterized by severe, acute illness and the increased frequency of chronic disease.

### Contaminated Instruments

It must be noted that in the "hidden parenteral exposure" are included pricks with contaminated instruments, syringes, etc., a fact that indicates that often the necessary measures for controlling the spread of infection are not taken in our hospitals.

From another study that was presented at the conference, it was determined that homosexual men are infected with hepatitis-C three times more often than the general public, a fact that indicates that hepatitis-C is clearly a sexually-transmitted disease and as such, in 1988, infected fewer homosexuals than in previous years, while a new rise took place in 1989 (always according to data from patients admitted to the Western Attiki Hospital). This may indicate that homosexuals, who had begun to practice safe sex because of AIDS in 1988, underestimated the dangers more in 1989. [passage omitted]

## IRELAND

### Death Rates From Cancer Rising

#### Breast, Lung, and Cervical Cancer Increasing

54500054 Dublin IRISH INDEPENDENT in English  
28 Nov 89 p 5

[Article by Stephen McGrath]

[Text] Death rates from breast, lung and cervical cancer are all on the increase, it was revealed yesterday.

Irish Cancer Society figures show 7,126 people here died from cancer in 1988—an increase of 207 on the 1987 figure of 6,919. The breakdown of last year's deaths show 610 people died from breast cancer, 472 from stomach cancer, and 745 from cancer of the colon. A huge 1,511 people died from cancer of the lung, trachea and bronchus, 69 people from cervical cancer, 217 from cancer of the rectum and 217 from leukaemia.

A further 3,258 deaths in an "other cancer" category included bone, testes, brain and cancer of the lymph glands.

Chief executive of the Irish Cancer Society, Tom Hudson said a number of factors were responsible for the sharp increases in reported deaths. "Diagnosis and analysis is more accurate today than it was a few years ago so the record is better shown," he pointed out.

"Cancer deaths from smoking are increasing for both men and women. People who have been smoking for 20 years or more are paying the penalty," he added.

### Urban Environment Increases Risk

54500072 Dublin IRISH INDEPENDENT in English  
6 Feb 90 p 3

[Article by Mairtin Mac Cormaic]

[Text] City living increases your risk of getting cancer ... and latest figures show that deaths from the killer disease nationwide have been rising every year since 1981.

"It is known that an increased risk of cancer is associated with life in urban environments," Minister for Health, Dr. Rory O'Hanlon, told Fine Gael TD Bernard Durkan.

According to official figures from his Department, the number of people who have died from cancer has risen steadily each year from 6,220 in 1981 to 7,126 in 1988, which are the most recent statistics available.

"These are frightening figures but I fear they do not reveal the full facts," said Mr. Durkan last night. "It is my belief that many people certified as having died from other causes such as pneumonia or heart failure may also have had cancer. So the actual number of people who have died from the disease may be much higher than the number reflected in the official figures," he added.

Dr. O'Hanlon acknowledged that an increased risk of cancer is associated with life in urban environments but pointed out that this has been the experience in all countries.

The Minister said that deaths from cancers of the lung, bronchus and trachea, had increased greatly in all Western countries during the last four or five decades. But lung cancer, he said, is now the most common form of fatal malignancy.

In Ireland lung cancer each year accounts for over 20 percent of all cancer deaths. But the most frequent cause of death from cancer in women is breast cancer. Mortality rates from breast cancer have, however, been relatively stable in recent years.

Stomach cancer, formerly one of the most common causes of death from cancer, has fallen dramatically in recent decades, and now accounts for around 500 fatalities annually compared with over 1,000 per annum 30 years ago.

Dr. O'Hanlon said the reasons for this decline are not easily understood but seemed likely to be related to changes in diet. He also pointed out that the percentage of smokers in the population has declined considerably during the past decade. For adult men the rate has dropped from 40 percent to 32 percent.

Since women started smoking heavily about 20 or 30 years later than men, lung cancer deaths in women are continuing to rise whereas for men they have begun to level off.

Meanwhile the Reach to Recovery programme operated by the Irish Cancer Society provides guidance to women who are about to have, or who have had, a breast operation. All that is necessary is to dial 10 and ask for "Cancer Freefone."

### **Minister Blames Death Rise on Mystery Virus**

54500063 Dublin IRISH INDEPENDENT in English  
6 Jan 90 p 1

[Article by Stephen McGrath: "Minister Blames Death Rise on Mystery Bug"]

[Text] A mystery epidemic leading to widespread illness and death, especially among the elderly, is responsible for the current crisis in health services, Health Minister Dr. Rory O'Hanlon said last night.

He acknowledged that there had been an abnormal increase in the number of deaths among the elderly and an exceptional level of serious illness throughout the country since the middle of December.

The Minister said the Department's chief medical officer was investigating the abnormal number of deaths and was working closely with UCD's Virus Reference Laboratory to establish the likely causes.

The epidemic had caused a significant increase in the level of emergency admissions to hospitals all over the country, the Minister maintained. Hospitals were giving priority to emergency cases and were opening up additional beds where necessary. In the past, he explained, there had been similar, short-term exceptional increases in the level of serious illness.

Dr. O'Hanlon announced he is to meet the chief executive officers of the health boards urgently to discuss the situation. He is also to meet senior administrators and medical staff at University College Hospital, Galway, on Wednesday where there has been serious overcrowding.

Yesterday the CEO of the Western Health Board, Eamonn Hannon, admitted that patients had been housed in corridors in the hospital but he denied a claim by nursing representative to the Board Helen Murphy that patients' lives had been at risk.

The CEO of the Mid-Western Health Board, D. J. Doherty, said bed numbers at Limerick, Nenagh and Ennis hospitals had been increased to cope with the situation.

Dr. Shane O'Neill, respiratory consultant at Dublin's Beaumont Hospital, said three unusual factors were causing the high levels of illness among the elderly: a combination of respiratory viruses, smog and flu.

### **Meningitis Cases Increase; November, December Statistics Given**

54500074 Dublin IRISH INDEPENDENT in English  
25 Jan 90 p 1

[Article by Stephen McGrath and Anne Maria McEnearney: "Deadly Meningitis care As Case Toll Soars"]

[Text] The incidence of meningitis has shown a disturbing increase, figures released yesterday by the Department of Health reveal.

There were 34 cases of bacterial or meningococcal meningitis—a dangerous form—nationwide in November and December last, compared with a total of only 21 cases for the whole of 1988.

A public health expert, who did not wish to be named, said last night: "There has been an increase in the incidence of meningococcal meningitis along the same lines as that experienced in England where there were 204 cases in December.



"Any increase in the incidence of meningitis is very serious and very worrying. Some areas have had more cases than others but the increase has been nationwide. This form of meningitis is acute and dangerous but any meningitis is serious and can kill. We hope that this outbreak is now dying out," he said.

A spokesman for the Department of Health said: "There was a nationwide increase in bacterial meningitis in 1989. There is no definite indication as to the cause. There was a higher than usual increase in Britain and one theory is that the two outbreaks may be connected.

"The Department doesn't regard the increase here as an epidemic. It is just a higher than usual incidence," he added.

Outbreaks of meningitis occur every few years in the winter months. There are two main forms of meningitis, bacterial and viral, and doctors regard the bacterial form as the more dangerous of the two.

Three cases of bacterial meningitis were reported in Galway recently and one patient died of the condition.

In Kerry there have been a number of meningitis cases in Tralee and Killarney but local health experts say there is not an epidemic in the region.

A Co. Cork doctor said last night that there had been more cases than usual in the country recently. He said he was aware of a number of cases between November and January but he didn't think there was an epidemic as they did not occur together.

#### **Emergence of Disease in Farmbred Salmon Studied**

54500055 Dublin *IRISH INDEPENDENT* in English  
25 Nov 89 p 6

[Article by Gordon Paterson]

[Text] Irish researchers are leading a worldwide probe into the emergence of disease in salmon reared on fish farms. The study at University College Cork is already at an advanced stage, with staff predicting a world first in finding a cure for infections in young salmon bred in cages stretching the west coast from Donegal to Cork in a £20m industry.

Attempts to eradicate the incidence of, for example, Pancreas Disease (PD) are likely to include the administration of a vaccine to each individual fish, the Irish Salmon Growers' Association disclosed yesterday.

Researchers are also trying to establish the genetic effect on farm salmon crossing with wild salmon and they are hopeful that a vaccine for PD can be found within the next 12 to 18 months. However, they are still trying to confirm whether the diseases are related to virus, bacteria or stress.

Within the last 12 months, up to 35 percent of young salmon were found to be suffering from PD and other

diseases. But the Association, members of which lost several million pounds in production this year, blamed the relatively high percentage on the extremely hot summer which affected coastal sea conditions.

A total of £466,500 has now been invested in a major Marine Research and Development programme involving five projects covering health, environment, quality development and the interaction of salmon farming with natural fisheries.

### **ITALY**

#### **Mandatory Hepatitis B Vaccinations Considered**

90WE0132A Rome *LA REPUBBLICA* In Italian  
15 Feb 90 p 24

[Article by Arnaldo D'Amico: "Higher Health Council Recommends Mandatory Hepatitis B Vaccination to Minister"]

[Text] Vaccination against type B hepatitis should become mandatory for all newborn infants in Italy and children up to age 12. The Higher Health Council made this decision at its last meeting. The aim is to reduce the spread of a disease that in itself and because of its consequences represents one of the most urgent medical problems in Italy.

The council's decision will now be considered by Minister De Lorenzo, who will arrange for the appropriate legal steps to be taken. Italy is the country in Europe where hepatitis B and hepatitis A are the most widespread. As a matter of fact, the Italian peninsula holds the record for the number of persons (300,000) infected every year with the virus causing the disease. Another indication of the high incidence of the disease is the number of women in whom the presence of the virus is detected when they give birth. The figure is about five percent. This is a disquieting statistic, inasmuch as the infection is transmitted to children, and they run the risk of developing the disease.

The wide spread of the hepatitis B virus in Italy is also confirmed by another European record the country holds, the 9,000 persons afflicted each year with cirrhosis of the liver and liver tumors. As a matter of fact, these are the two most serious consequences of hepatitis B, ones that fortunately are rather rare. Unfortunately, however, it is fairly difficult to prevent it. Infection with the virus and later development of the infection sometimes take place with no particularly troublesome symptoms, and the patient is not aware of it. Thus, the disease develops slowly, sometimes over a period of decades, finally appearing suddenly with cirrhosis or tumor of the liver.

For these reasons, it is important to carry out the test to detect the presence of the virus in the blood. If the test is positive, preventive measures can be taken to protect against unpleasant surprises. This is a recommendation

that doctors have been repeating for years, above all to persons at risk, the same ones exposed to the AIDS virus. In fact, the hepatitis virus is transmitted in the same way that AIDS is, by infected blood, but more easily because it is much stronger. The infection is transmitted by the sharing of hypodermic needles and by unprotected homosexual and heterosexual relations with infected partners.

The data of the Higher Institute of Health indicate that, over the past five years, the infection has occurred most often in the 0-14 and 15-25 age groups. According to Paolo Pasquini, director of the clinical epidemiology department of the Higher Institute of Health, it is urgent to vaccinate adolescents against the disease before they come in contact with the risk factors of hepatitis B. In 1988, for example, the incidence was two per 100,000 inhabitants in the 0-14 age group, rising to 22 per 100,000 in the 15-25 age group, the highest among the age groups studied.

But the disease is also widespread in the adult population, on the order of five cases per 100,000 inhabitants. Pasquini explains that this high incidence is due to the fact that B virus infection is also transmitted by certain medical and paramedical practices such as surgical operations, catheterization, bronchoscopy, and dental procedures, and also by tattooing and acupuncture. Consequently, such vaccination is an important innovative step ahead of the current vaccination program in Italy. In the past it was, in fact, recommended only for the so-called categories at risk—that is, persons highly exposed to the B virus, such as children born of mothers carrying the virus, persons living with chronic sufferers, medical personnel, hemophiliacs, persons who have received several blood transfusions, persons undergoing hemodialysis, and drug addicts.

Pasquini warns, however, that the indication of mass vaccination should not be used as an excuse for not taking immediate simple but equally effective preventive measures such as careful sterilization of all instruments used for invasive diagnostic practices.

The hepatitis B vaccine is administered by injection in three doses at intervals followed by a fourth booster shot. Vaccines developed by genetic engineering, ones offering total safety even against any potential side effects, were recently placed on the market.

## NORWAY

### Possible Meningitis Epidemic Decline

90WE0112A Oslo AFTENPOSTEN in Norwegian  
16 Jan 90 p 6

[Article by Hanna Hanes]

[Text] The epidemic of infectious cerebrospinal meningitis may be declining. If so it will not be necessary to carry out mass vaccinations.

Since 1974 around 300-400 cases of infectious cerebrospinal meningitis have been reported annually in Norway. In 1987 the figure was down to 211, in 1988 it fell to 140. The preliminary figure for 1989 is 143. It is primarily the number of reported cases of meningococcal infection in the so-called B group that has declined. These bacteria were also responsible for the majority of the cases.

We asked if the epidemic is dying out.

"No, in that case the figure for 1989 would have been lower than it was for 1988," said Sigmund Aasen of the National Institute of Public Health (SIFF). He would not make any predictions about the future development of the epidemic.

There are indications that the meningococci have struck a little earlier this winter. There were already quite a few cases in December. "Past experience has shown that influenza and respiratory infections can provide a gateway for the meningococci," said SIFF project leader Gunnar Bjune.

Bjune is in charge of the big vaccination experiment in which nearly 200,000 junior high school students have now been vaccinated against the meningococci in group B. This year and next the effectiveness of the vaccine will be measured.

Will a mass vaccination of children with the new vaccine be relevant if the epidemic is now winding down?

"No, in that case we will vaccinate only in areas where the bacteria show up."

## PORTUGAL

### High Incidence of Hepatitis B Virus

90WE0130A Lisbon DIARIO DE NOTICIAS  
in Portuguese 14 Feb 90 p 50

[Excerpts] The figures on hepatitis B in Portugal are high, as DIARIO DE NOTICIAS was told by the director of the Santa Maria Hospital, Professor Miguel Carneiro de Moura, a specialist in that disease.

There are currently from 140,000 to 200,000 chronic carriers of the hepatitis B virus in the country, as well as 15,000-20,000 cases of chronic hepatitis B, of which number from 7,500 to 10,000 could evolve to cirrhosis of the liver; the latter being the fourth cause of death among males in Portugal at present. Several hundred of these cirrhosis cases could evolve to liver cancer. It is estimated that between 300 and 500 are susceptible to undergoing that evolution, although no epidemiological studies have been made on this subject.

It is not necessarily fatal, as AIDS is, and has in its favor the possibility of prevention through vaccination and treatment, or even of a cure in cases with early detection. A serious aspect of the spread of hepatitis B lies in the

fact that, as in the case of AIDS, one can be a chronic carrier of the virus without ever being aware of this condition.

"Those thousands of cases constitute the reservoir of infection," claims Professor Carneiro de Moura, who uses as a basis for comparison with the large number of carriers, namely 140,000-200,000, the image of "the crowd leaving Benfica Stadium." [passage omitted]

#### **20,000-30,000 New Cases Annually**

He adds: "As for acute hepatitis, which is where all this begins, our calculations point to 20-30 cases per 100,000 inhabitants; in other words, from 2,000 to 3,000 cases of acute hepatitis B per year. But these are the visible cases, the ones revealed by symptoms: jaundice, for example.

"However, we know that there is a ratio of one symptomatic patient for every nine patients who do not show symptoms. Making the count, one reckons that there are in Portugal 20,000-30,000 new cases of infection with hepatitis B virus annually."

From an epidemiological standpoint, these figures fit the country into the Type III pattern with respect to infection by hepatitis B virus in Europe, associated with the Mediterranean Basin (Spain, Portugal, Italy, and Greece).

What is being done in Portugal to halt the advance of the disease? On the governmental level a Hepatitis B Task Force was formed, headed by the general director of primary health care, Bandeira e Costa. The government appointed Professor Carneiro de Moura as a specialist in the disease for that group. Many other medical agencies are represented in the group, which is scheduled to submit its first report at the end of February. The vaccination program should result from this work. It is the group's idea to expand the indications for vaccinating various risk groups, but not to adopt universal vaccination. According to Professor Carneiro de Moura, this policy conforms to the policy being pursued in the other European countries, of which only Germany and Switzerland have adopted nationwide vaccination. [passage omitted]

## **SPAIN**

### **Spread of African Horse Sickness Continues**

#### **Sparks Controversy**

*90WE0034A Madrid EL INDEPENDIENTE  
in Spanish 16 Oct 89 p 21*

[Article by Maria Jesus Villalpando: "With a Thousand Animals Dead, African Horse Sickness Breaks Out Again in Andalusia; Government May Have to Quarantine Southern Half of Peninsula, According to Some Experts"]

[Text] Just when the outbreak of African horse sickness that Andalusia had been afflicted with since last 31 July seemed to be under control, new deaths of horses in

Cordoba—which had supposedly been effectively vaccinated—have revived the controversy.

While the authorities in the regions adjacent to Andalusia, including those in Portugal, are beginning to fear that the disease is spreading, there are many veterinarians and cattlemen who are denouncing the passive attitude of the central administration, which they accuse of waiting until the elections are over before taking drastic steps, which quarantining the entire southern half of Spain would be.

Meanwhile, the eight horses that died in the Cordoba town of Montoro and more than 11 with symptoms of the disease have once again raised the controversy between cattlemen and the administration. And despite the fact that the cattlemen are questioning the efficacy of the Agricultural Advisory Board of Andalusia's vaccination of the Cordoba horses, the autonomous community administration describes this doubt as to the proper condition of some of the vaccinations that have been a constant subject of controversy since this new outbreak as "absurd and unfounded."

Despite the fact that they have recently succeeded in keeping the death rate down to a half an animal a day, at this rate the total number of deaths will reach four figures during the next few days, or—what amounts to the same—1,000 dead horses, in the slightly more than 2 months that separate the death of the first mare in Sotogrande (Cadiz) from those of the horses that died in Montoro.

At the present time, the number of dead horses throughout Andalusia comes to about 980, 133 of which died as a direct result of the virus and the rest were destroyed. Likewise, practically all of the horses in the region have been vaccinated, attaining the figure of 136,412 doses, most of them in the provinces of Sevilla and Huelva where the epidemic has been most virulent.

#### **Different Hypotheses**

The new outbreak in Cordoba has given rise to a disagreement between cattlemen and officials of the Andalusian Agricultural Advisory Board, who do not in the end understand how some 20 horses have displayed symptoms of the disease when they were supposed to have been vaccinated.

Once again—as has been the case throughout the entire epidemic—the hypotheses are not in agreement even among the officials of the Agricultural Advisory Board. In general, board officials describe the idea that the death of the horses in the cordoba town of Montoro may have been due to the poor condition of the vaccinations as "erroneous, absurd, or unfounded." The Andalusian administration's position is favorably disposed to the possibility that the Cordoba horses were already infected with the African horse sickness virus before they were vaccinated last 28 September. It is alleged that these animals contracted the virus because of the clandestine

movement of animals, one of the major obstacles to completely controlling the disease.

However, a representative of the Seville Animal Health Center, a subsidiary agency of the Andalusian Agricultural Advisory Board, told this daily that "the possibility may also exist that the vaccinations that immobilized the horses in the new source of infection of Montoro were administered in a faulty manner," without this veterinarian's at any time ruling out the possibility that the vaccines were not in proper condition.

The thesis that some batches of the vaccine were in bad condition, and that part of the herd was therefore deficiently immunized, is not only defended by technicians of the Agricultural Advisory Board, but by the veterinarians themselves, who had noted with relief that the outbreak seemed to have been eradicated, but who are now witnessing its spread to provinces like Cordoba or Jaen, which until now were free of the epidemic. The same opinion is held by many breeders and cattlemen, especially when they recall all the misadventures surrounding the importation of the vaccines from South Africa: delays in delivery, the "disappearance" of the vaccines for 2 days at a London airport, etc.

### Concern

Meanwhile, evidence that the African horse sickness outbreak still exists in latent form has motivated the authorities to begin to adopt new protective measures in this autonomous community as well as in the neighboring regions—Extremadura, for example, where they have already begun to vaccinate approximately 40,000 of the 70,000 horses that make up the population in that region. Inside Andalusia, the border between Cordoba and Jaen is also a special protection zone.

In like manner, the Portuguese authorities—who hope to replace Barcelona in the 1992 Olympics horse trials—have also begun to take steps against the possible spread of the virus, although its chief vector, the culicid mosquito, will probably lose its vigor with the onset of winter. Specifically, the Portuguese authorities have decided to vaccinate those horses that are found within a radius of 40 km of the source, while establishing a safety zone of 100 km.

While the African horse sickness virus appears to be spreading beyond Andalusia, the top officials of the Ministry of Agriculture do not seem to be leaning toward more drastic control and protection measures, among which would be the stabling of the entire Spanish horse population, or at least that in the half of Spain from Madrid south, as Balthus Erasmus, world expert on African horse sickness, has recommended.

According to some reports, the damages, expense, and controversy this measure would presumably raise among cattlemen right in the middle of an election campaign has led the authorities to postpone a decision that will probably be made after next 29 October. In fact and as

far as this daily could ascertain, the Ministry of Agriculture is working on a draft program which will contain new measures for the protection and stabling of horses in the face of epidemics.

### Special Measures

Jaen—Pedro J. Valderas reports that the Andalusian Government has adopted a number of special measures in the province of Jaen for the purpose of keeping the new outbreak of African horse sickness from spreading to the neighboring community of Castilla La Mancha. Among the chief measures adopted are an increase by the Civil Guard in the checking and supervision of heavy trucks on the stretch of National Highway 4 that passes through the province of Jaen in order to prevent the illegal transporting of saddle horses, and precautionary suspension during the next 2 weeks of any boar or deer hunts using horses in the towns of Marmolejo and Andujar, which border on the town of Montoro. This last measure was adopted following a resolution last Wednesday by the Andalusian Council's Agriculture Committee and, although this will only last 2 weeks at first, the members of this committee do not rule out an extension of the ban for another month.

The cutting off of the heads of killed animals during hunts, an operation that is usually performed in the meat board slaughterhouse, is also going to be banned to prevent horse traffic in the area bordering on Montoro.

Andalusian Council authorities have already voiced their concern that the the supervision of heavy trucks to prevent the illegal transporting of horses on National Highway 4 may produce difficulties in the way of serious traffic problems.

The government representative confirmed the fact that several cases of this clandestine traffic in horses have been uncovered, which is why prompt punitive measures have now been initiated, and that the Andalusian Council has opted to take very severe action.

### Accord With Portugal

90WE0034B Madrid YA in Spanish 19 Oct 89 p 19

["Spain-Portugal Accord on African Horse Sickness Vaccination"]

[Text] Spain and Portugal have agreed to accord "priority to the border regions" in their respective vaccinations against African horse sickness, which affects animals in both countries. The agreement was announced yesterday by the Portuguese General Directorate of Livestock after a special meeting held by Spanish and Portuguese specialists in Lisbon yesterday, Tuesday.

Foremost among the conclusions reached at this meeting was the Spanish authorities' decision to extend their vaccination campaign to the provinces of Badajoz, Caceres, Ciudad Real, and Albacete. "Appropriate measures will be adopted by Portugal," the communique adds with

regard to this last point. It also notes that both countries decided to tighten control over the circulation of horses and agreed on the "need to propose to international agencies that the international animal health code be reformulated."

### Vaccination

90WE0034C Madrid YA in Spanish 14 Oct 89 p 18

["Measure Went Into Effect in Extremadura Yesterday; Vaccination of 46,000 Horses Against African Horse Sickness Begins"]

[Text] About 46,000 horses, mules, and donkeys are to be vaccinated against African horse sickness in Extremadura as of yesterday, the day the order declaring this measure to be obligatory throughout the region went into effect. In addition, the entire equine population will be immobilized. The reason for both measures is the discovery of African horse sickness during examination of the viscera of a mare that died in the town of Valencia del Mombuey, in Badajoz, last 19 September.

The equine population in Extremadura comes to about 60,000 animals, 14,000 of which have already been vaccinated in the southern part of the province of Badajoz, where centers of this disease were discovered last August, EUROPA PRESS reports.

The order, in which "the presence of African horse sickness in the municipal district of Valencia del Mombuey" is officially acknowledged, advises that "animals within the territory of the autonomous community that are suspected of being infected with the disease will be immediately destroyed." It also decrees that "disinfection and insect-eradication measures will be intensified on the ranches involved and in vehicles intended for the transportation of animals."

Extremadura Council Councillor of Agriculture Francisco Amarillo announced publication of the order last Wednesday after confirming the autonomous government's suspicions that there might indeed be a source of African horse sickness in the region that may have spread from Portugal to the province of Badajoz.

Up to now, the Extremadura Government has acknowledged the deaths of seven horses "under questionable circumstances," although the daily HOY stated in its Thursday issue that another horse belonging to the owner of the mare that died in Valencia del Mombuey had recently died.

Elsewhere, seven horses have already died in the Cordoba town of Montoro with symptoms of African horse sickness, which is sowing the fear that the disease may spread to the provinces of Eastern Andalusia, where no cases of African horse sickness have yet come to light.

Montoro cattlemen assure us that the seven dead horses had been vaccinated against African horse sickness, which is why they suspect that poor condition of the vaccines could have caused the deaths. This line of

reasoning has been rejected by Andalusian Council Director General of Agriculture Gerardo de las Casas, who said that the disease has spread because of clandestine movements of horses.

And lastly, we have been able to ascertain that Moroccan Ministry of Agriculture officials have announced the destruction of eight horses infected with African horse sickness in the provinces of Tetuan and Larache. The Moroccan communique noted that the appearance of the virus was due to the proximity of the outbreaks uncovered in Andalusia in 1988 and 1989. These assertions by the Moroccan ministry have been described as rash by Gerardo de las Casas.

### Outbreak of Bovine Pneumonia

#### Second in Segovia

90WE0035A Madrid YA in Spanish 13 Oct 89 p 19

[Text] A new outbreak of pneumonia that has so far made it necessary to destroy 150 cows has come to light on a ranch in the Segovia town of Escalona del Prado owned by Urbano Jimeno, according to a report confirmed by Castilla y Leon Council sources.

This is the second outbreak of bovine pneumonia that has been reported in the province of Segovia, since it was announced in August that a source of infection had been uncovered in 1985 in the town of Navas de San Antonio and had led to the total loss of the herd because of the destruction of over 3,500 cows and the confiscation of another 1,000.

The outbreak in Navas de San Antonio won the attention of the European Parliament following a motion made by Rafael Calvo Ortega, CDS [Social and Democratic Center] Eurodeputy for Segovia, who requested Community aid for the cattlemen affected by the outbreak.

The 150 head of cattle, the property of Urbano Jimeno, were destroyed last Wednesday. This cattleman informed the news media that he had bought the cattle in Torrelavega (Cantabria) and that the losses resulting from the destruction of his cows would amount to 70 million pesetas.

In response to the suspicion that this outbreak of pneumonia may have originated in Cantabria, the Cantabrian Regional Council asserted that this disease had been totally eliminated from Cantabria after the outbreak uncovered during the last few days of August and that the first efforts at health control had been launched for the purpose of ensuring the health of the Cantabrian cattle population.

#### Passive Attitude

Officials of the Castilla y Leon Government livestock services have described as passive the Ministry of Agriculture's attitude toward this problem and, while they asserted that compensation for cattlemen's losses is the responsibility of the central government, they have

decided to reimburse the cattlemen in the hope that the ministry will take prompt action.

Therefore, the Castilla y Leon Council will pay the cattlemen who own the cows infected by the new source of bovine pneumonia 50 percent of the value of each cow destroyed because of the disease, or a total of about 80 million pesetas, according to information provided by Pedro Llorente, the director general of the Council's Animal Production Department.

Following the news of the new outbreak, which will be officially announced to the European Community within the next few days, Castilla y Leon Council animal health officials ordered the quarantining of the town's more a thousand head of cattle. The veterinarian sources in the town acknowledged that the pneumonia outbreak was uncovered early last September, but that it had not been officially reported to the Castilla y Leon Council until a few days ago.

### **Guadalix Outbreak**

*90WE0035B Madrid YA in Spanish 19 Oct 89 p 19*

[Text] People's Party (PP) Deputy to the Madrid Assembly Jose Maria de Federico delivered an urgent interpellation yesterday during a plenary session of the Assembly in the face of a possible outbreak of bovine pneumonia in the municipality of Guadalix de la Sierra. De Federico wanted to know what emergency measures had been devised to solve the problem and to protect the rest of the region's ranches.

The PP deputy stated to EUROPE PRESS that it is a matter for concern "when, through the efforts of the cattlemen, not the Socialist government, there are ranches in our region that are exemplary in terms of quality and production that by far surpass the national average."

Moreover, Ministry of Agriculture and Castilla y Leon Council experts are working in Fuensauco (Zamora) to study the present condition of the cattle after uncovering an outbreak of pneumonia in a few cows in this town. Council Agriculture Councillor Fernando Zamacola declared last night that the three tests run on Fuensauco cattle to detect possible pneumonia were positive.

### **Secrecy Recommended**

*90WE0035C Madrid DIARIO 16 in Spanish 12 Oct 89 p 14*

[Article by DIARIO 16 correspondent Charo Rueda: "Castilla y Leon Council Admits It: New Outbreak of Pneumonia in Segovia"]

[Text] A new outbreak of bovine pneumonia has been uncovered in the Segovia town of Escalona del Prado, a fact confirmed for DIARIO 16 by Castilla y Leon Council sources yesterday, a month after the Ministry of Agriculture and the regional government's intention of concealing the outbreak of this disease in Navas de San

Antonio (Segovia) so that it would have no repercussions on the Spanish market came to light.

The new outbreak of this contagious disease, cases of which must be reported, appeared in six cows belonging to the same owner in Escalona del Prado, who had to destroy all the cows in his stable yesterday morning, a hundred cows, in compliance with the regulations currently in effect.

Discovery of the new cases of infection was made by means of blood tests conducted by Castilla y Leon Council technicians on cattle in the province of Segovia, since the first of the outbreaks was also uncovered in this province.

Castilla y Leon Council sources informed DIARIO 16 yesterday that, once the Ministry of Agriculture was notified of the presence of the disease, ministry officials advised that it be kept a secret and recommended that blood tests be conducted on nearly 1,000 head of cattle. According to the same sources, the ministry continued to recommend secrecy after these tests were completed.

Officials of the regional government livestock services announced yesterday that, "in view of the Ministry of Agriculture's passive attitude, the Council will pay damages to the cattlemen who have had to destroy sick cows even though this is the responsibility of MAPA [Ministry of Agriculture, Fisheries, and Food]."

### **Jump in 'Poverty-Related' Diseases 'Worrisome'**

*90WE0119D Madrid DIARIO 16 in Spanish 2 Jan 90 p 9*

[Article by Arturo Cenzano]

[Text] The latest data compiled by the staff of WHO [World Health Organization] shows a worrisome upturn in poverty-related diseases in Spain.

The lack of sufficient economic resources has a decisive impact on health hygiene, and causes diseases which had been considered practically eradicated from our country to reappear.

The close link between health and poverty is revealed from these quite spectacular and meaningful data. While the incidence of leprosy is practically zero in the most developed regions, Andalusia has the largest number of the 6,000 cases of leprosy that have been officially reported.

The provinces of Malaga, Jaen and Granada head the European listing of numbers of cases of leprosy, with a total of about 2,000 patients. At the same time, the region of Castilla-La Mancha heads the world record in the incidence of hydatid cyst disease, a disease that is definitely considered a Third World disease.

The eight million poor people now officially listed in Spain are considered a high risk community from the health standpoint. A considerable part of this population

group engages in prostitution either occasionally or on a regular basis, while disregarding any health precautions. This makes them chains of propagation for spreading sexually transmitted diseases (STDs), including gonorrhea, syphilis, and AIDS.

Extremadura, Andalusia, the Canaries, Galicia and the area bordering Portugal are the regions most afflicted by poverty; but in addition to these traditionally poor regions, in recent years poverty has become a greater problem in some very disturbing radical fringes, like the Basque Country.

In the Basque Country, extreme poverty is not related to structural defects, but rather to the behavior of the majority of the persons afflicted, and frequently to drug dependency and other social diseases, such as alcoholism, 'ludopatía', or gambling addiction.

The difference between the traditionally poor regions and those where some sizeable segments of their population have recently had higher income levels is often found in the fact that, while the traditionally poor areas include resources such as prostitution among their usual methods of subsistence, among the second group, these resources are generally obtained in an occasional form and are frequently used to support a drug habit, not to provide for everyday needs.

Among the most troublesome signs of a surge in poverty-related diseases are perinatal syphilis, the proliferation of scabies, and the existence of about 3 million people infected with various types of hepatitis. Among this underclass, there has been a spectacular growth in the spread of herpes, genital warts, and condylomata.

## SWEDEN

### Study Shows Chlamydia Spreading Among Youth

90WE0114A Stockholm DAGENS NYHETER  
in Swedish 20 Dec 89 p 6

["Bad News About Chlamydia"]

[Text] One out of three Swedes will catch chlamydia before the age of 35. Despite this fact, information is not reaching those who are at risk.

This is the conclusion drawn by Doctor Peet Tull, a specialist in communicable diseases in Visby, who surveyed the sexual habits of 1,200 residents of Gotland between the ages of 16 and 31.

"Information about chlamydia is directed at youth between the ages of 15 and 17 who have their first sexual experiences at about that time but who most often wait several years before embarking on one or more lasting sexual relationships," Peet Tull said.

## UNITED KINGDOM

### Salmonella on Rise Despite Preventive Measures

54500059A London THE DAILY TELEGRAPH  
in English 31 Jan 90 p 2

[Article by Peter Pallot, health services staff: "Poultry Purge Fails To Halt Tide of Salmonella"]

[Text] Cases of salmonella poisoning associated with eggs and poultry are at record levels despite an intense drive to clean up chicken farming. Figures released yesterday by the Public Health Laboratory Service disclosed that there were 12,931 confirmed cases of salmonella poisoning by the type linked with poultry in England and Wales last year.

In 1988, before the Government introduced strict hygiene regulations and began slaughtering infected flocks, there were 409 fewer cases.

All varieties of salmonella poisoning also reached a record last year. There were 29,998 cases, compared with 27,478 in 1988.

Looking at the seasonal incidence last year of the chicken-egg strain—known as salmonella enteritidis PT4—the service records an early peak in February, then a drop to April, followed by a steady rise through the summer to a peak at the end of September.

Outbreaks of salmonella involving two or more people also increased last year. The service recorded 955 outbreaks, the majority of unknown origin, but 42 confirmed to be from eggs and 24 from poultry. In nine cases, pork was blamed.

In 1988 there were 455 outbreaks, 32 confirmed from eggs, 27 from poultry and five from pork.

A Department of Health spokeswoman said: "The three percent increase in cases of the type associated with poultry last year compared with 1988 should be compared with a 152 percent increase in 1988 over 1987."

More than one million egg-laying birds from 87 flocks have been slaughtered since new measures came into operation last March.

At the end of the year, 87 laying flocks, two layer-breeder flocks and 27 flocks of broiler-breeders were under restrictions.

The measures require incidents of salmonella infections in farm animals to be recorded. Nearly two-thirds of the 3,101 total were found in poultry, with 908 in cattle, 134 in sheep and 133 in pigs.

### Mystery Virus Held Responsible for Infants' Deaths

54500061A London THE DAILY TELEGRAPH  
in English 26 Jan 90 p 6

[Article by Peter Pallot, health services staff]

[Text] A team of four professors, 15 consultants, 12 other doctors and 15 outside laboratories all failed to

find out why six babies died in a hospital ward, an inquest was told yesterday.

Prof Brian Corrin, who carried out post-mortem examination on the babies at the Brompton Hospital, west London, said the cause of death was probably an "as yet unidentified" virus.

He said: "There were 7,000 deaths related to a flu-like illness over the Christmas period and that has to be a possibility."

Prof Corrin, head of Brompton's pathology department, added: "There is still no trace of the virus."

The resumed inquest heard that all six babies were being treated for congenital heart disease. Five had undergone surgery when they contracted a pneumonia-like illness.

After hearing about the deaths of Roxanne Coren, aged 19 days, and Robert Davis, eight weeks, Dr Paul Knapman, the Westminster coroner, said: "It is true to say a blank has been drawn."

Only six of the 10 places in the intensive care ward were used because of a shortage of specially-trained nurses. Following the deaths over Christmas, the ward was shut down, sterilised and redecorated. It will re-open on Monday.

Prof Corrin said Robert's death was caused by congenital heart disease and respiratory distress syndrome. Roxanne's death was caused by similar factors.

Robert, of Wandle Road, Hackbridge, Surrey, and Roxanne, of Victor Park, Maidstone, Kent, died on January 6.

Verdict: Natural causes.

### Accelerated Drive To Immunize Infants Planned

54500060A London *THE DAILY TELEGRAPH*  
in English 31 Jan 90 p 6

[Article by Peter Pallot, health services staff: "Fast 3-Vaccine Immunization for Babies"]

[Text] Babies are to be given a rapid series of three vaccinations, including whooping cough, in an accelerated immunisation drive planned by the Department of Health.

Under guidelines being issued today to public health directors, babies will receive, with parental approval, all three doses of a triple vaccine—against diphtheria, tetanus and whooping cough—before the age of four months.

The move follows concern at the low levels of uptake of whooping cough vaccine, which has been said to cause brain damage in a small number of cases.

Under the new arrangements, the triple vaccine will be given at two months, three months and four months.

At present, health workers administer the first dose at three months, the second at up to five months and the last at up to 11 months.

The department is to tell doctors that an accelerated schedule will give a higher uptake of whooping cough vaccine and reduce the drop-out rate for all immunisations.

The practice of giving polio vaccine at the same time as the triple dose will continue.

Controversy surrounding whooping cough vaccine has led many parents to reject immunisation and only 67 percent of babies are currently protected.

The debate has subsided since a High Court ruling by Mr Justice Stuart-Smith in 1988 that the parents of a brain-damaged girl had not brought sufficient evidence to prove their daughter was affected by the vaccine.

At one time, nearly 80 percent of babies were vaccinated against whooping cough and it was almost eliminated, but vaccination figures fell to 31 percent in the 1970s after some children suffered brain damage.

### Winter Flu Epidemic Statistics Given

#### Figures Possibly Incomplete

54500050 London *THE DAILY TELEGRAPH*  
in English 30 Dec 89 p 2

[Article by Peter Pallot, Health Services Staff]

[Text] Flu is still claiming thousands of victims, but the epidemic has peaked, the Royal College of General Practitioners said yesterday.

During the seven days to Boxing Day, 91 people per 100,000 had flu. But surgeries were closed on two weekdays, suggesting a true influenza incidence of about 130 per 100,000 during Christmas week, still a sharp decline.

During the previous week, the college recorded 260 cases per 100,000 compared with 290 per 100,000 in the second week of December.

Official figures published on Thursday showed that up to 15 Dec, 600 people had died in the epidemic. The Office of Population Censuses and Surveys recorded 472 flu deaths in the week to 15 Dec, compared with 102 the previous week and 16 in the last week of November. Only four people died from flu in the third week of November.

The Office's tally lags nearly two weeks behind the college's tracking service, and it is likely that about 400 deaths occurred in the third week of this month with several hundred more during Christmas week.

Dr Douglas Fleming, of the college's research unit in Birmingham, said the substantial reductions in cases



tended to be confirmed by a 50 percent reduction in the new incidence of all respiratory disorders.

But the figures should be seen against the interruption to surgery hours over Christmas.

Dr Fleming said: "Decreased incidence has been uniform across all age groups. We interpret these data as confirmation that the peak of the epidemic has passed." He now expected a dramatic fall in cases.

The college tracks infections through 228 family doctors in 62 practices.

Dr Fleming said that although surgeries were closed for Christmas, home visits would still have been made and

recorded, although the cases registered would be artificially down on a normal working weekday.

#### Statistics Through Last of Year

54500050 London *THE DAILY TELEGRAPH*  
in English 11 Jan 90 p 4

[Article by our Health Services Staff]

[Text] Influenza caused 1,910 deaths in the six weeks up to 29 Dec, according to official figures released yesterday by the Office of Population, Censuses and Surveys. There were 530 deaths in the week to 29 Dec, making the current epidemic, which has peaked, substantially worse than that of 14 years ago when 1,283 died.